| Project     | Catalog # | Туре |  |
|-------------|-----------|------|--|
| Prepared by | Notes     | Date |  |



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# Lumark

## **NFFLD Night Falcon**

Floodlight Luminaire

### **Product Certifications & Features**



























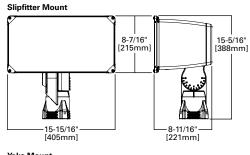


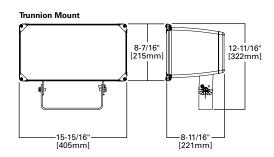


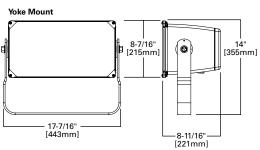
### **Quick Facts**

- Up to 156 lumens per watt
- Two optical distributions (wide and spot)
- 4 lumen packages ranging from 11,500 26,300 nominal lumens (80 180W)
- · Replaces 250 450W HID

### **Dimensional Details**







Lumark **NFFLD Night Falcon** 

### Ordering Information

Sample Number: NFFLD-C40-E-UNV-66-S-CB-PER

| Product Family   | Light Engine <sup>2</sup>  | Driver <sup>3</sup>                | Voltage  | Distribution  | Mounting  | Color  |  |  |  |
|--|--|------------------------------------|--|---|---|--|--|--|--|
| NFFLD=Night Falcon LED Floodlight BAA-NFFLD=Night Falcon LED Floodlight, Buy American Act Compliant <sup>17</sup> TAA-NFFLD=Night Falcon LED Floodlight, Trade Agreements Act Compliant <sup>17</sup> BABA-NFFLD=Night Falcon LED Floodlight, Build America Buy America Act Compliant <sup>19</sup>  | C25=10,500 Nominal Lumens<br>C40=16,900 Nominal Lumens<br>C55=20,000 Nominal Lumens<br>C70=24,000 Nominal Lumens | E=Non-Dimming<br>D=Dimming (0-10V) | UNV=120-277V<br>347=347V <sup>4</sup><br>480=480V <sup>4</sup> | 66=NEMA 6H x 6V Wide<br>33=NEMA 3H x 3V Spot <sup>5</sup>   | S=Slipfitter <sup>6</sup><br>T=Trunnion<br>Y=Yoke | CB=Carbon Bronze (Standard) BK=Black BZ=Bronze AP=Grey WH=White WHT=Summit White DP=Dark Platinum GM=Graphite Metallic |  |  |  |
| Options (Add as Suffix)  |  |                                    | Accessorie   | Accessories (Order Separately) 12, 18   |   |  |  |  |  |
| 7030=70 CRI / 3000K? 7050=70 CRI / 5000K? 7060=70 CRI / 5000K? 8040=80 CRI / 4000K? PER=NEMA 3-PIN Twistlock Photocontrol Receptacle PER7-NEMA 7-PIN Twistlock Photocontrol Receptacle s 10K=10kV)10kA UL 1449 Surge Protective Device D10=External 0-10V Dimming Leads s HA=50°C High Ambient Temperature s MSP/DIM-L12=Integrated Occupancy Sensor for Dimming Operation, 8'-12' Mounting Height s MSP/DIM-L30=Integrated Occupancy Sensor for Dimming Operation, 12'-30' Mounting Height s MSP-L32=Integrated Occupancy Sensor for ON/OFF Operation, 8'-12' Mounting Height solution. |  |                                    |  | FA63=3" 0.D. Surface Mount Bracket 13 OA1223=10kV/10kA UL 1449 Surge Protective Device Replacement OA/RA1013=Photocontrol Shorting Cap  OA/RA1014=NEMA Photocontrol - 120V OA/RA1016=NEMA Photocontrol - Multi-Tap OA/RA1027=NEMA Photocontrol - 480V OA/RA1201=NEMA Photocontrol - 347V RAB-XX=Right Angle Pipe Bracket for Slipfitter SAB-XX=Steel Angle Bracket for Trunnion TYS-XX=Slipfitter Adapter for 2-3/8", 3" or 3-1/2" 0.D. Tenon 14 TSZ/NFFLD-XX-Top and Side Visors 15 VS/NFFLD=Vandal Shield 15 WG/NFFLD=Wire Guard 15 ISHH-01=Integrated Sensor Programming Remote WOLC-7P-10A=WaveLinx Outdoor Control Module (7-pin) 16 |   |  |  |  |  |

- DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. Standard 4000K CCT and minimum 70 CRI. Consult IES file for actual lumen output.
- Consult factory for driver surge protection values.
- Not recommended for use with ungrounded, delta configured systems
- Only available in C25 adn C40 light engines.
- Fits 2-3/8" to 3" O.D. tenon, wire leads run through slipfitter.
- Extended lead times apply. Use dedicated IES files for 3000K and 5700K when performing layouts. These files are published on the Night Falcon luminaire product page on the website
- 8. Must order with dimming driver.
- Not available with 3H x 3V spot distribution.
- 10. 0-10V dimming driver required. Integrated sensor option only available in slipfitter mounting.
- 11. Not available with Photocontrol.
- 12. Replace XX with color designation. Additional brackets and adaptors available on the poles product page on the website.
- 13. Not available with tenon mount.
- 14. Not available with slipfitter mount.

- 14. Not available with sliphitter mount.
  15. Cannot combine TS2 (Top and Side Visor), VS (Vandal Shield), or WG (Wire Guard), limited to one external guard per fixture.
  16. Requires 7-pin NEMA twistlock photocontrol receptacle. The WOLC-7 cannot be used in conjunction with additional sensors or controls.
  17. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
  18. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
  19. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (ILIA). Individual Government Agencies may have more stringent compliance standards. Please refer to the <u>DOMESTIC PREFERENCES</u> website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

### Stock Ordering Information

Stock Sample Number: NFFLD-C40-S

| Series             | Light Engine   | Mounting                | Voltage                              |
|--------------------|--|-------------------------|--------------------------------------|
| NFFLD=Night Falcon | C25=10,500 Nominal Lumens<br>C40=16,900 Nominal Lumens | S=Slipfitter T=Trunnion | [BLANK]=120-277V<br><b>347</b> =347V |

NOTES: Options not available with stock products. Order accessories as separate items for field installation. Refer to standard ordering information to add options. Refer to In-Stock Guide for availability. Stock fixture is 4000K, 0-10V dimming driver, 120-277V or 347V 6Hx6V, carbon bronze only.



### **Product Specifications**

#### Construction

- Heavy-duty, die-cast aluminum housing, driver compartment, and driver housing door
- Driver compartment and optical chamber are IP66 rated
- Driver maintenance access via removable door using pan head screws
- One-piece silicone gasket seals the door to the fixture housing

#### Optics

- Vacuum-metalized reflector for high-efficiency illumination
- NEMA type 6H x 6V and 3H x 3V distributions available
- Clear, tempered glass lens with full circumference form-in-place silicone gasket protects optics from damage

#### **Electrical**

- LED driver is mounted to removable die-cast aluminum door
- Integral 6kV surge is standard
- Ambient operating temperatures from -40°C to 40°C
- Greater than 90% lumen maintenance expected at 60,000 hours per IESNA TM-21
- · 0-10V dimming driver available
- > 0.9 Power Factor; < 20% Total Harmonic Distortion

#### Mounting

- · Suitable for mounting within 4' (1.2m) of the ground
- Heavy-guage steel trunnion and yoke mounts are supplied with 3ft of pre-wired 16/3 SOW wet location rated cord
- Die-cast aluminum slipfitter with a tooth-lock adjustment that can be adjusted in 5° increments. Preset to 45° tilt. Visual 15° adjustment indicators on the knuckle allow for 180° field rotation of the flood assembly. Slipfitter mounts to 2" pipe or 2-3/8" O.D. tenons
- · Effective Projected Area: 1.25 sq. ft.

#### Compliance

- DLC and DLC Premium listed visit designlights. org to confirm listed variations
- BAA domestic preference option meets BAA requirements. See <u>DOMESTIC PREFERENCES</u> website or consult the CLS Domestic Preferences team for more information
- FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Cooper's products with a BAA designation are manufactured in the US and utilize a BAA COTS exemption rule for compliance. To verify a configured product with specific accessories and options meet BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. Please refer to the DOMESTIC.
   PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

#### Finish

 Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear

#### **Shipping Data**

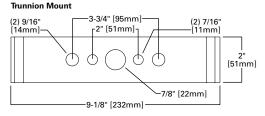
· Approximate net weight: 20 lbs. (9.09 kgs.)

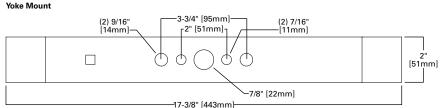
#### Warranty

 Five-year limited warranty. Consult website for details. <u>www.cooperlighting.com/legal</u>

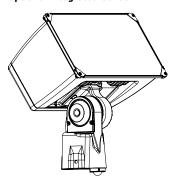
### **Mounting Details**

#### **Drilling Patterns**

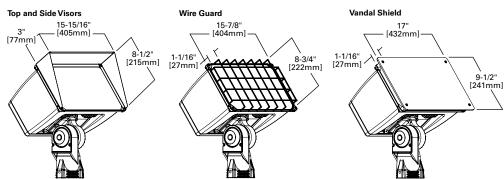




#### **Optional Integrated Sensor**



### Accessories



Lumark **NFFLD Night Falcon** 

### **Energy and Performance Data**

145W

23,797

4000K

70

184W

NFFLD-C70

#### **Power and Lumens**

|                             | 6x6       |                |                | 3x3            |           |                |                |                |
|-----------------------------|-----------|----------------|----------------|----------------|-----------|----------------|----------------|----------------|
| C25 LED                     | NFFLD-C25 | NFFLD-C25-7030 | NFFLD-C25-7050 | NFFLD-C25-7060 | NFFLD-C25 | NFFLD-C25-7030 | NFFLD-C25-7050 | NFFLD-C25-7060 |
| Delivered Lumens            | 10,530    | 10,122         | 10,383         | 10,217         | 10,272    | 9,874          | 10,128         | 9,967          |
| CCT (Kelvin)                | 4000K     | 3000K          | 5000K          | 5700K          | 4000K     | 3000K          | 5000K          | 5700K          |
| CRI (Color Rendering Index) | 70        | 70             | 70             | 70             | 70        | 70             | 70             | 70             |
| Power Consumption (Watts)   | 85W       | 85W            | 85W            | 85W            | 93W       | 93W            | 93W            | 93W            |
| C40 LED                     | NFFLD-C40 | NFFLD-C40-7030 | NFFLD-C40-7050 | NFFLD-C40-7060 | NFFLD-C40 | NFFLD-C40-7030 | NFFLD-C40-7050 | NFFLD-C40-7060 |
| Delivered Lumens            | 16,932    | 16,268         | 16,686         | 16,421         | 14,113    | 13,567         | 13,916         | 13,694         |
| CCT (Kelvin)                | 4000K     | 3000K          | 5000K          | 5700K          | 4000K     | 3000K          | 5000K          | 5700K          |
| CRI (Color Rendering Index) | 70        | 70             | 70             | 70             | 70        | 70             | 70             | 70             |
| Power Consumption (Watts)   | 128W      | 128W           | 128W           | 128W           | 143W      | 143W           | 143W           | 143W           |
| C55 LED                     | NFFLD-C55 | NFFLD-C55-7030 | NFFLD-C55-7050 | NFFLD-C55-7060 |           |                |                |                |
| Delivered Lumens            | 19,943    | 19,407         | 20,144         | 20,285         |           |                |                |                |
| CCT (Kelvin)                | 4000K     | 3000K          | 5000K          | 5700K          |           |                |                |                |
| CRI (Color Rendering Index) | 70        | 70             | 70             | 70             |           |                |                |                |

145W

NFFLD-C70-7060

24,205

5700K

70 184W

145W

NFFLD-C70-7050

24,037

5000K

70

184W

#### **Current Draw**

C70 LED

**Delivered Lumens** 

CCT (Kelvin)

Power Consumption (Watts)

CRI (Color Rendering Index)

Power Consumption (Watts)

|             | Model Series |             |             |             |             |             |  |  |  |
|-------------|--------------|-------------|-------------|-------------|-------------|-------------|--|--|--|
| Valtage (V) |              | 6:          | 3x3         |             |             |             |  |  |  |
| Voltage (V) | NFFLD-C25    | NFFLD-C40   | NFFLD-C55   | NFFLD-C70   | NFFLD-C25   | NFFLD-C40   |  |  |  |
|             | Current (A)  | Current (A) | Current (A) | Current (A) | Current (A) | Current (A) |  |  |  |
| 120V        | 0.708        | 1.070       | 1.2299      | 1.5695      | 0.778       | 1.190       |  |  |  |
| 277V        | 0.340        | 0.465       | 0.535       | 0.6726      | 0.340       | 0.531       |  |  |  |
| 347V        | 0.251        | 0.377       | 0.4213      | 0.5334      | 0.271       | 0.419       |  |  |  |
| 480V        | 0.195        | 0.273       | 0.3044      | 0.3831      | 0.207       | 0.320       |  |  |  |

145W

NFFLD-C70-7030

23,157

3000K

70

184W

### **Lumen Multiplier**

| Ambient<br>Temperature | Lumen<br>Multiplier |
|------------------------|---------------------|
| 10°C                   | 1.03                |
| 15°C                   | 1.02                |
| 25°C                   | 1.00                |
| 40°C                   | 0.97                |
| 50°C                   | 0.96                |

#### **Lumen Maintenance**

| Ambient<br>Temperature | TM-21 Lumen<br>Maintenance<br>(60,000 Hours) | Theoretical L70 (Hours) |  |  |  |  |  |
|------------------------|--|-------------------------|--|--|--|--|--|
| 6H x 6V (Wide)         |  |                         |  |  |  |  |  |
| 25°C                   | > 94.55%                                     | > 388,000               |  |  |  |  |  |
| 40°C                   | > 93.58%                                     | > 327,000               |  |  |  |  |  |
| 50°C                   |  | -                       |  |  |  |  |  |
| 3H x 3V (Spot)         |  |                         |  |  |  |  |  |
| 25°C                   | >92.18%                                      | >262,000                |  |  |  |  |  |
| 40°C                   | >91.81%                                      | >249,000                |  |  |  |  |  |