

# Noctura Series

LED Flood Luminaires

Rev. Date: V29 05/28/26

## Product Description

The Noctura® LED Flood luminaire minimizes cost of ownership with easy installation, high performance and quality backed by a Cree Lighting 5-year limited warranty. The Noctura Series has a coordinated style across area, flood and wall mount luminaires to provide a consistent daytime appearance across a building site or campus. Versatile mounting configurations offer installation flexibility and ease of application for ground, direct pole, tenon or vertical flat surface mounting.

**Applications:** Ideal for both retrofit and new installation: accent, sign or facade lighting applications.

## Performance Summary

**Lumen Output:** Up to 28,600 lumens

**Efficacy:** Up to 158 LPW

**CRI:** Minimum 70 CRI

**CCT:** 4000K, 5000K

**Limited Warranty\*:** 5 years on luminaire, mounts, visors and cables/1 year on remaining field-installed accessories

\* See <https://www.creelighting.com/resources/warranties/> for warranty terms

## Accessories

Field-Installed		
<b>Top Visor</b>		<b>Button Photocell</b>
- Lumen multiplier from standard optic: 0.976	NTF-TV-21L-BZ	JL-423CZ
NTF-TV-6L-BZ	- For use with 21L only	- UL (120-277V) Voltage only
- For use with 6L only	NTF-TV-28L-BZ	<b>Cable</b>
	- For use with 28L only	NTX-QC-5 (120-277 Volt only)
		NTX-QC-5-U (120-480 Volt)
		- 5' (1.5m) cable replacement
		<b>Shorting Cap</b>
		XA-XLSLHRT

## Ordering Information

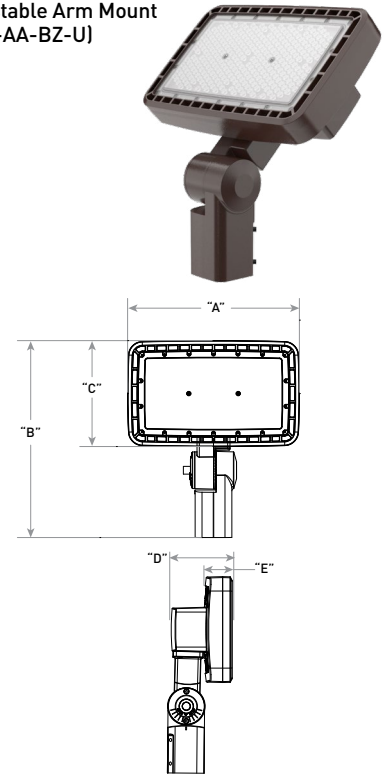
Fully assembled luminaire is composed of two components that must be ordered separately:

Example: **Mount:** NTX-AA-BZ-U + **Luminaire:** NTF-A-NM-N4-21L-40K-UL-BZ

Mount (Luminaire must be ordered separately)*		
<b>Knuckle Mount (Small Housings only)</b>	<b>Adjustable Arm Mounts (Large Housings only)</b>	<b>Trunnion Mounts (Large Housings only)</b>
NTF-KN-BZ	NTX-AA-BZ-U (120-480 Volt)	NTX-TR-BZ-U (120-480 Volt)
- For use only with 3L, 6L, and 10L	- Adjustable Arm Mount w/knockout for Field-Installed Button Photocell (by others)	- Trunnion Mount
<b>Yoke Mounts (Small Housings only)</b>	NTX-AA-7R-BZ-U (120-480 Volt)	NTX-TR-7R-BZ-U (120-480 Volt)
NTF-YM-1L-BZ	- Adjustable Arm Mount w/NEMA® 7-pin Photocell Receptacle	- Trunnion Mount w/NEMA® 7-pin Photocell Receptacle
- For use only with 1L		NTX-TR-PK-BZ-U (120-480 Volt)
NTF-YM-6L-BZ		- Trunnion Mount w/knockout for Field-Installed Button Photocell (by others)
- For use only with 6L		
NTF-YM-10L-BZ		
- For use only with 10L		
<b>Note:</b> NEMA® 7-pin Photocell Receptacle requires photocell or shorting cap by others		

\* Reference EPA and pole configuration suitability data beginning on page 7

## 21L Adjustable Arm Mount (NTX-AA-BZ-U)



Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
21L*	13.5 lbs (6.1kg)	14.4" (366mm)	15.2" (386mm)	8.9" (226mm)	5.1" (130mm)	2.3" (58mm)
28L*	17.2 lbs (7.8kg)	13.4" (340mm)	22.8" (582mm)	14.7" (373mm)	5.0" (127mm)	2.1" (53mm)

See pages 3-5 for additional line drawings

\* Includes housing & mount (for housing weight only refer to page 2)

Luminaire (Mount must be ordered separately)*								
Product	Version	Mounting**	Optic	Lumen Package***	CCT	Voltage	Color Options	Options
<b>Small Housings</b>								
<b>Available 3L Product Combinations</b>								
NTF	A	NM	N6 - NEMA 6x6	3L	40K	UL - 120-277V	BZ	P - Button Photocell
NTF	A	NM	N6 - NEMA 6x6	3L	50K	UL - 120-277V	BZ	P - Button Photocell
<b>Available 6L Product Combinations</b>								
NTF	A	NM	N6 - NEMA 6x6	6L	40K	UL - 120-277V	BZ	P - Button Photocell
NTF	A	NM	N6 - NEMA 6x6	6L	50K	UL - 120-277V	BZ	P - Button Photocell
<b>Available 10L Product Combinations</b>								
NTF	A	NM	N6 - NEMA 6x6	10L	40K	UL - 120-277V	BZ	
<b>Large Housings</b>								
<b>Available 21L Product Combinations</b>								
NTF	A	NM	N4 - NEMA 4x4	21L	40K	UL - 120-277V	BZ	
<b>Available 28L Product Combinations</b>								
NTF	A	NM	N4 - NEMA 4x4	28L	40K	UL - 120-277V	BZ	

\* Note: Limited product availability. Consult factory for availability

\*\* See mount descriptions for applicable mounts

\*\*\* Lumen Package codes identify approximate light output only. Actual lumen output levels may vary depending on CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values



Website: creelighting.com

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**CREE LIGHTING®**

**Product Specifications**

**CONSTRUCTION & MATERIALS**

- Luminaire housing is rugged die cast aluminum with integral LED driver compartment which is specifically designed for LED applications with advanced LED thermal management
- Housing and mounting accessories finished in bronze polyester powder coat paint, 2.5 mil nominal thickness
- Small flood housings include knockout provision for field-installed button type photocell (by others)
- Field-installed button photocells should not exceed the following size limitations: 2.14" (54.5mm) L x 1.14" (29mm) W x 1.73" (44mm) H. Nipple should be centered in the housing to ensure proper fit
- Mounting options (for 3L, 6L, 10L) include:**
  - Yoke Mount is heavy gauge steel construction and mounts to flat surfaces
  - Yoke mount includes 18" (340mm) prewired SOW cord exiting the housing
  - Mounting for the knuckle adaptor is rugged die cast aluminum and mounts to 1/2" (12.7mm) NPT, junction box cover (supplied by others)
  - Knuckle mount includes tooth lock aiming that can be adjusted 180° in 5° increments
- Mounting options for (21L and 28L) include:**
  - Adjustable arm w/knockout provision for field-installed button type photocell (by others), adjustable arm w/NEMA® 7-pin photocell receptacle, trunnion mount, trunnion mount w/NEMA® 7-pin photocell receptacle, and trunnion mount w/knockout provision for field-installed button type photocell (by others)
  - Photocell or shorting cap by others. Intended for downlight applications with maximum 45° tilt
  - Adjustable arm mount is constructed of rugged die cast aluminum and mounts to 2" (51mm) IP, 2.375" (60mm) O.D. tenons. It includes tooth lock aiming that can be adjusted from 0° (horizontal) to 180° in 5° increments
  - Trunnion mount features rugged steel construction, mounts to vertical flat surfaces, and can be adjusted from 0° (horizontal) to 180° in 15° increments
- Housing Weight:** 3L-2.9 lbs. (1.3kg), 6L-3.2 lbs. (1.4kg), 10L-6.3 lbs. (2.9kg), 21L-9.7 lbs. (4.4kg), 28L-13.4 lbs. (6.1kg)

**OPTICS**

- Mid-power LED array Floodlight optics are available in: medium flood (NEMA 4x4) and wide flood (NEMA 6x6) for 4000K and 5000K CCTs with a minimum of 70 CRI. Efficacies up to 158 LPW for minimal energy consumption. Top cutoff visors are available for light trespass and glare

**ELECTRICAL SYSTEM**

- Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- Power Factor:** > 0.9 at full load
- Total Harmonic Distortion:** < 20% at full load
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Integral 10kV/5kA surge suppression protection standard
- Designed with 0-10V dimming capabilities. Controls by others. Dimming only available on 21L and 28L
- 10V Source Current:** 0.20 mA
- Operating Temperature Range:** -30°C - +40°C (-22°F - +104°F)

**REGULATORY & VOLUNTARY QUALIFICATIONS**

- cULus Listed (UL1598)
- Suitable for wet locations
- Meets NEMA C82.77 standards
- Drivers and LEDs are UL Recognized in accordance with UL8750
- Enclosure meets IP66 requirements per IEC 60529
- ANSI C136.2 10kV/5kA surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- RoHS compliant. Consult factory for additional details
- Adjustable arm and knuckle mounts are certified to ANSI C136.31-2018,

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3G vibration standards. Yoke and trunnion mounts are certified to ANSI C136.31-2001, 1.5G vibration standards

-  **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

Electrical Data*								
Lumen Package	System Watts 120-277V	System Watts 347-480V	Total Current (A)					
			120V	208V	240V	277V	347V	480V
3L	21	N/A	0.21	0.12	0.11	0.09	N/A	N/A
6L	40	N/A	0.4	0.23	0.20	0.17	N/A	N/A
10L	64	64	0.64	0.37	0.32	0.28	0.22	0.16
21L	140	N/A	1.40	0.8	0.7	0.61	N/A	N/A
28L	186	N/A	1.86	1.07	0.93	0.81	N/A	N/A

\* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/-10%

Noctura Series Ambient Adjusted Lumen Maintenance <sup>1</sup>						
Ambient	Initial LMF	25K hr Reported <sup>2</sup> LMF	50K hr Reported <sup>2</sup> LMF	75K hr Estimated <sup>3</sup> LMF	100K hr Estimated <sup>3</sup> LMF	
5°C (41°F)	1.04	0.98	0.92	0.87	0.82	
10°C (50°F)	1.03	0.97	0.91	0.86	0.81	
15°C (59°F)	1.02	0.96	0.91	0.85	0.80	
20°C (68°F)	1.01	0.95	0.90	0.84	0.79	
25°C (77°F)	1.00	0.94	0.89	0.83	0.79	
30°C (86°F)	0.99	0.93	0.88	0.83	0.78	
35°C (95°F)	0.98	0.93	0.87	0.82	0.77	
40°C (104°F)	0.97	0.91	0.85	0.80	0.74	

<sup>1</sup> Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

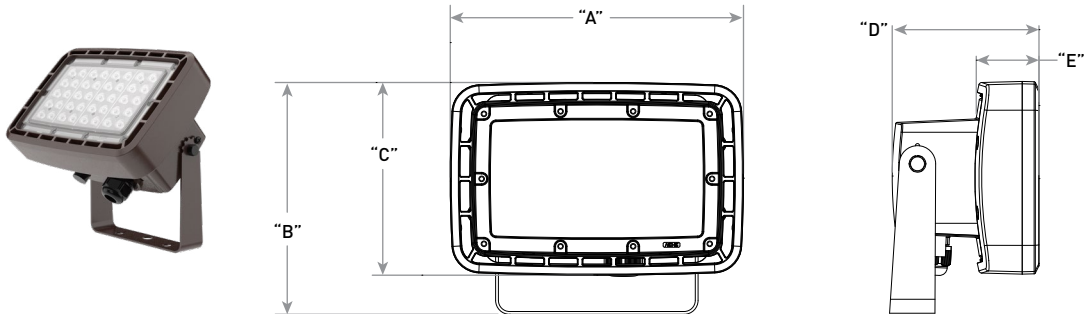
<sup>2</sup> In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

<sup>3</sup> Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

Noctura Series Flood Distributions		
Optic	Field Angle Range*	Beam Angle*
N4	46-70	30D
N6	100-130	70D

\* The field angle is the included angle between points of 10% of maximum intensity, and the beam angle is the included angle between points of 50% of maximum intensity.

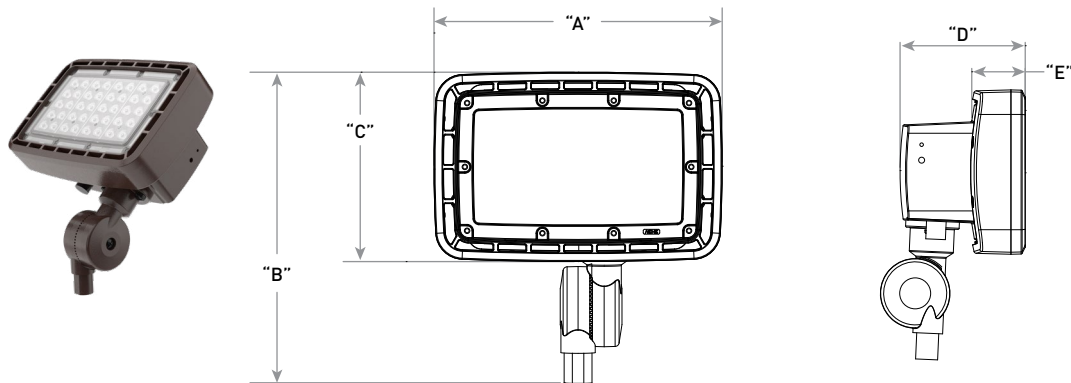
**3L**  
**Yoke Mount (NTF-YM-\*L-BZ)**  
 \* Specify 3L, 6L or 10L Lumen Package



Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
3L	3.3 lbs. (1.5kg)	8.3" [211mm]	6.5" [165mm]	5.4" [137mm]	4.1" [104mm]	1.8" [46mm]
6L	3.6 lbs.(1.6kg)	9.5" [241mm]	6.7" [170mm]	5.7" [145mm]	4.1" [104mm]	1.8" [46mm]
10L	6.7 lbs (3.1kg)	10.6" [269mm]	7.2" [180mm]	5.9" [150mm]	4.4" [112mm]	2.3" [58mm]

\* Includes housing & mount (for housing weight only refer to page 2)

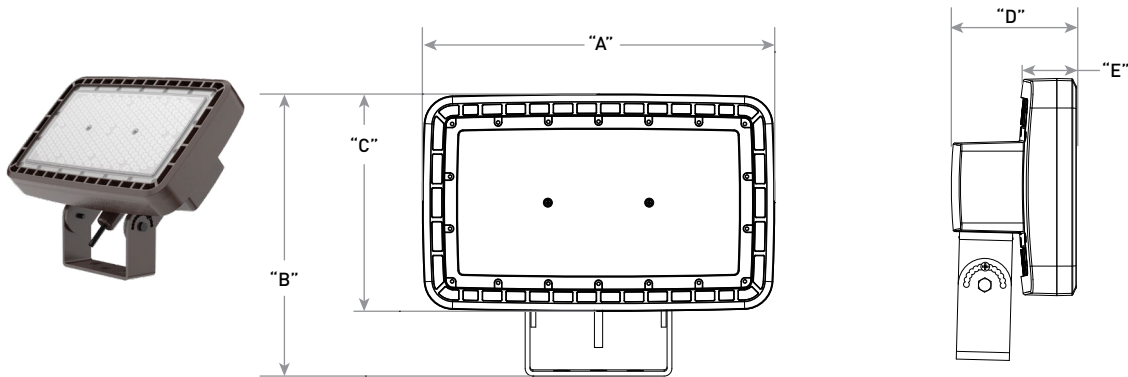
**3L**  
**Knuckle Mount (NTF-KN-BZ)**



Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
3L	3.3 lbs. (1.5kg)	8.3" [211mm]	8.9" [226mm]	5.4" [137mm]	4.1" [104mm]	1.8" [46mm]
6L	3.6 lbs. (1.6kg)	9.5" [241mm]	6.7" [170mm]	5.7" [145mm]	4.1" [104mm]	1.8" [46mm]
10L	6.7 lbs. (3.0kg)	10.6" [269mm]	9.3" [236mm]	5.9" [150mm]	4.4" [112mm]	2.3" [58mm]

\* Includes housing & mount (for housing weight only refer to page 2)

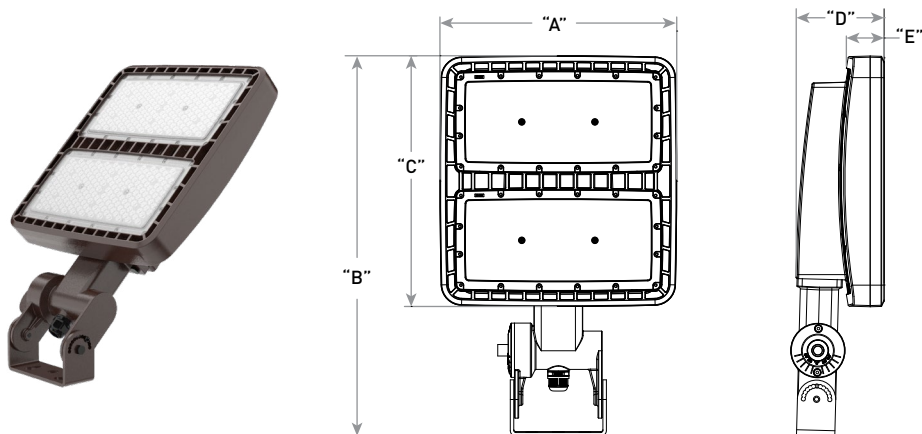
**21L  
Trunnion Mount (NTX-TR-BZ-U)**



Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
21L	12.8 lbs. [5.8kg]	14.4" [366mm]	11.4" [290mm]	8.9" [226mm]	5.1" [130mm]	2.3" [58mm]
28L	16.5 lbs. [7.5kg]	13.4" [340mm]	17.8" [452mm]	14.2" [361mm]	5.0" [127mm]	2.1" [53mm]

\* Includes housing & mount (for housing weight only refer to page 2)

**28L  
Trunnion Mount w/Knockout for Field-Installed Button Photocell (by others)  
(NTX-TR-PK-BZ-U)**

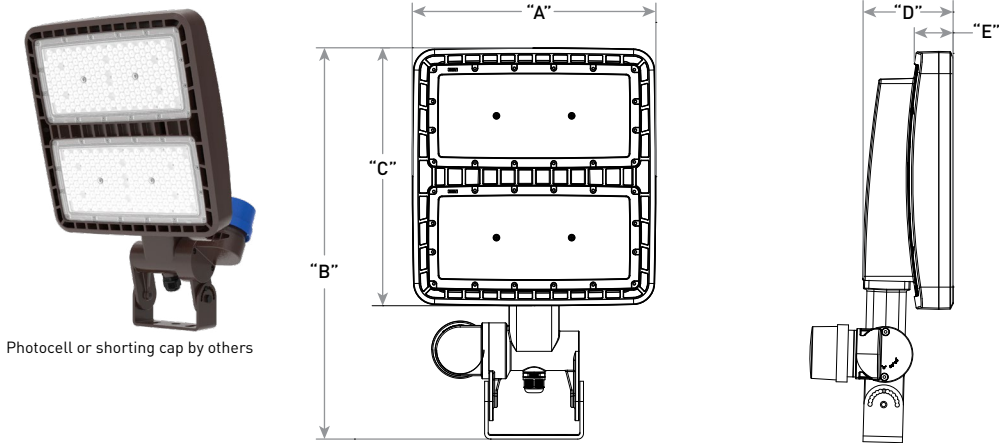


Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
21L	13.9 lbs. [1.8kg]	14.4" [366mm]	15.2" [386mm]	8.9" [1226mm]	5.1" [130mm]	2.3" [58mm]
28L	17.6 lbs. [8.0kg]	13.4" [340mm]	21.5" [546mm]	14.7" [373mm]	5.0" [127mm]	2.1" [53mm]

\* Includes housing & mount (for housing weight only refer to page 2)

Noctura® LED Flood Luminaire

**28L**  
**Trunnion Mount w/NEMA® 7-pin Photocell Receptacle**  
**(NTX-TR-7R-BZ-U)**



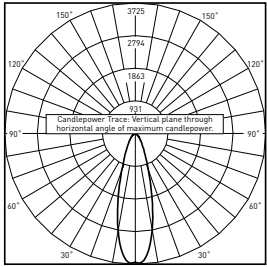
Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
21L	13.9 lbs. (6.3kg)	14.4" (366mm)	15.2" (386mm)	8.9" (226mm)	5.1" (130mm)	2.3" (58mm)
28L	17.6 lbs. (8.0kg)	13.4" (340mm)	21.5" (546mm)	14.7" (373mm)	5.0" (127mm)	2.1" (53mm)

\* Includes housing & mount (for housing weight only refer to page 2)

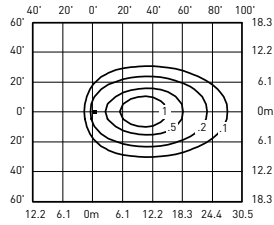
**Photometry**

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult:  
<http://creelighting.com/products/outdoor/flood/noctura-flood>

**N4**



**Ningbo TengLi Testing Co. Test Report #:**  
 STD190155NB-TB  
 NTF-A-\*\*-N4-1L-30K-UL-\*\*-  
 Initial Delivered Lumens:1,673



NTF-A-\*\*-N4-3L-40K-UL-BZ  
 Mounting Height: 25' (7.6m) A.F.G., 60° Tilt  
 Initial Delivered Lumens: 3,010  
 Initial FC at grade

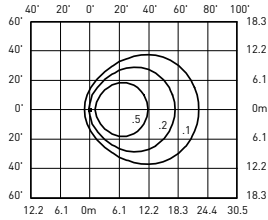
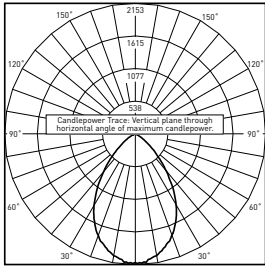
NEMA® 4 Flood Distribution		
Lumen Package	Initial Delivered Lumens*	Efficacy (LPW)
21L	21,700 (4000K)	155
28L	28,600 (4000K)	154

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

**Photometry**

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/flood/noctura-flood>

**N6**



**Ningbo TengLi Testing Co. Test Report #:**  
 STD190155NB-TH  
 NTF-A-\*\*-N6-3L-30K-UL-\*\*  
 Initial Delivered Lumens: 2,929

NTF-A-\*\*-N6-3L-40K-UL-BZ  
 Mounting Height: 25' (7.6m) A.F.G., 60° Tilt  
 Initial Delivered Lumens: 1,750  
 Initial FC at grade

NEMA® 6 Flood Distribution		
Lumen Package	Initial Delivered Lumens*	Efficacy (LPW)
3L	3,010 (4000K/5000K)	143
6L	6,300 (4000K/5000K)	158
10L	9,900 (4000K)	155

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

**Luminaire EPA**

Adjustable Arm Mount - NTX-AA-BZ-U w/housing Weight: 21L: 13.5 lbs. (6.1kg); 28L: 17.2 lbs. (7.8kg); Add 1.1lbs. (0.5kg) for NTX-AA-7R-BZ or NTX-AA-7R-BZ-U mount								
Lumen Package	Single	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	3 @ 180°	4 @ 90°	4 @ 180°
<b>Tenon Configuration (0°-45° Tilt):</b> If used with Cree Lighting tenons, please add tenon EPA with Luminaire EPA								
	PB-1A*; PT-1; PW-1A3**	PB-2A*; PB-2R2.375; PD-2A4(90); PT-2(90)*	PB-2A*; PB-2R2.375; PD-2A4(180); PT-2(180); PW-2A3**	PB-3A*; PB-3R2.375; PD-3A4(90); PT-3(90)	PB-3A*; PB-3R2.375; PT-3(120)	PB-3A*; PB-3R2.375	PB-4A*(90); PB-4R2.375; PD-4A4(90); PT-4(90)	PB-4A*(180); PB-4R2.375
<b>0° Tilt</b>								
21L	0.54	1.08	1.08	1.62	1.62	1.62	2.16	2.16
28L	0.73	1.46	1.46	1.99	1.99	1.99	2.52	2.52
<b>10° Tilt</b>								
21L	0.67	1.34	1.34	2.01	2.01	2.01	2.68	2.68
28L	0.74	1.48	1.48	2.22	2.36	2.22	2.96	2.96
<b>20° Tilt</b>								
21L	0.78	1.56	1.56	2.34	2.34	2.34	3.12	3.12
28L	0.91	1.82	1.82	2.73	2.74	2.73	3.64	3.64
<b>30° Tilt</b>								
21L	0.83	1.66	1.66	2.49	2.49	2.49	3.32	3.32
28L	1.02	2.04	2.04	3.06	3.06	3.06	4.08	4.08
<b>45° Tilt</b>								
21L	0.87	1.74	1.74	2.61	2.61	2.61	3.48	3.48
28L	1.13	2.26	2.26	3.39	3.39	3.39	4.52	4.52

\* Specify pole size: 3 [3"], 4 [4"], 5 [5"], or 6 [6"] for single, double or triple luminaire orientation or 4 [4"], 5 [5"], or 6 [6"] for quad luminaire orientation  
 \*\* These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 [3"], 4 [4"], 5 [5"], or 6 [6"]

**Tenon EPA**

Part Number	EPA
PB-1A*	None
PB-2A*	0.82
PB-3A*	1.52
PB-4A*(180)	2.22
PB-4A*(90)	1.11
PB-2R2.375	0.92
PB-7R2.375	1.62
PB-4R2.375	2.32
PD Series Tenons	0.09
PT Series Tenons	0.10
PW-1A3**	0.47
PW-2A3**	0.94
WM-2	0.08
WM-4	0.25

\* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation  
 \*\* These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

**Replacement Parts**

Driver Replacement Kits		
Product	Lumen Package*	Voltage*
NTF-A-DVRKT	1L 1,600 lumens	UL Universal 120-277V
	3L 3,000 lumens	
	6L 6,500 lumens	
	10L 10,000 lumens	
	21L 21,500 lumens	
	28L 28,600 lumens	

\* Consult factory for 14L lumen package or UH (347-480V).

Tenons and Brackets* (must specify color)	
<b>Square Internal Mount Vertical Tenons (Steel)</b> - Mounts to 3-6" (76-152mm) square aluminum or steel poles PB-1A* - Single PB-2A* - 180° Twin PB-3A* - 180° Triple PB-4A*(90) - 90° Quad PB-4A*(180) - 180° Quad	<b>Round External Mount Vertical Tenons (Steel)</b> - Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons PB-2R2.375 - Twin PB-4R2.375 - Quad PB-7R2.375 - Triple
<b>Square Internal Mount Horizontal Tenons (Aluminum)</b> - Mounts to 4" (102mm) square aluminum or steel poles PD-2A4(90) - 90° Twin PD-2A4(180) - 180° Twin PD-3A4(90) - 90° Triple PD-4A4(90) - 90° Quad	<b>Round External Mount Horizontal Tenons (Aluminum)</b> - Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons - Mounts to square pole with PB-1A* tenon PT-1 - Single (Vertical) PT-2(90) - 90° Twin PT-2(180) - 180° Twin PT-3(90) - 90° Triple PT-3(120) - 120° Triple PT-4(90) - 90° Quad
<b>Wall Mount Brackets</b> - Mounts to wall or roof WM-2 - Horizontal for NTX-AA mounts WM-4 - L-Shape for NTX-AA mounts	<b>Mid-Pole Bracket</b> - Mounts to square pole PW-1A3** - Single PW-2A3** - Double
<b>Conduit Slipfitter</b> - Hub with a threaded entry for 1/2" knuckle mount -Slips over a 2.375" (60mm) O.D. pipe or tenon MNH-2 - for NTF-KN mounts	<b>Ground Mount Post</b> - For ground-mounted flood luminaires PGM-1 - for NTX-AA mounts

\* Refer to the [Bracket and Tenons spec sheet](#) for more details