

Noctura Series

LED Flood Luminaires

Product Description

The Noctura™ LED Flood luminaire minimizes cost of ownership with easy installation, high performance and quality backed by a Cree 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 28,400 lumens

Efficacy: Up to 158 LPW

CRI: Minimum 70 CRI

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty*: 5 years on luminaire

*See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed		
Top Visor		Cable
NTF-TV-1L-BZ - For use with 1L only	NTF-TV-14L-BZ - For use with 14L only	NTX-QC-5 - 5' (1.5m) cable replacement
NTF-TV-3L-BZ - For use with 3L only	NTF-TV-21L-BZ - For use with 21L only	
NTF-TV-6L-BZ - For use with 6L only	NTF-TV-28L-BZ - For use with 28L only	
NTF-TV-10L-BZ - For use with 10L only		

Ordering Information

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

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

Mount (Luminaire must be ordered separately)*		
Knuckle Mount NTF-KN-BZ - Knuckle Mount - For use with 1L, 3L, 6L, 10L only	Adjustable Arm Mounts NTX-AA-BZ - Adjustable Arm Mount w/knockout for Field-Installed Button Photocell (by others)	Trunnion Mounts NTX-TR-BZ - Trunnion Mount NTX-TR-3R-BZ - Trunnion Mount w/NEMA® 3-Pin Photocell Receptacle
Yoke Mounts NTF-YM-1L-BZ - Yoke Mount - For use with 1L only NTF-YM-3L-BZ - Yoke Mount - For use with 3L only NTF-YM-6L-BZ - Yoke Mount - For use with 6L only NTF-YM-10L-BZ - Yoke Mount - For use with 10L only	NTX-AA-3R-BZ - Adjustable Arm Mount w/NEMA® 3-Pin Photocell Receptacle NTX-3R-BZ - Extended Arm Mount - Includes a NEMA® 3-Pin Photocell Receptacle and a knockout for an Occupancy Sensor	NTX-TR-PK-BZ - Trunnion Mount w/knockout for Field-Installed Button Photocell (by others) NTX-3R-BZ - Extended Arm Mount - Includes a NEMA® 3-Pin Photocell Receptacle and a knockout for an Occupancy Sensor

Note: Photocell or shorting cap by others

Ordering Information

Example: NTF-A-NM-N4-1L-40K-UL-BZ

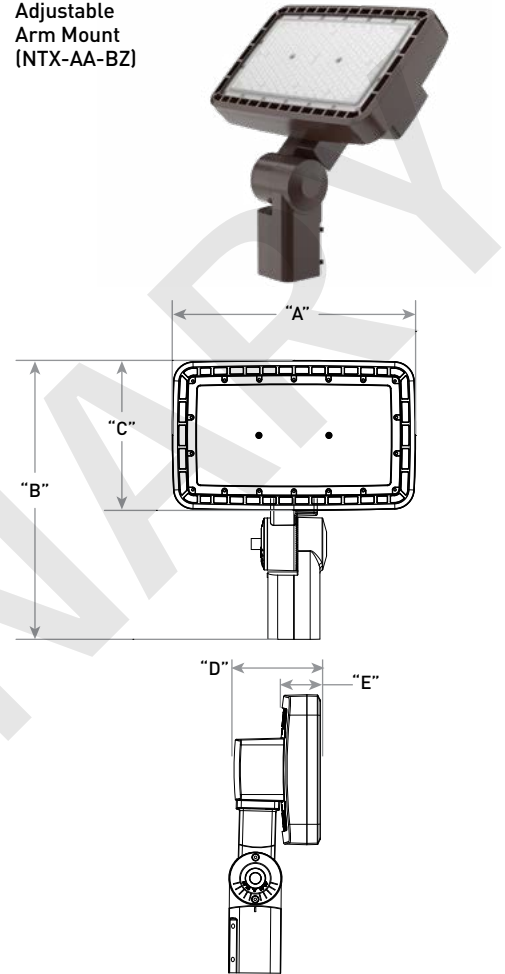
Luminaire (Mount must be ordered separately)								
NTF	A	NM						BZ
Product	Version	Mounting	Optic	Lumen Package**		CCT	Voltage	Color
NTF	A	NM No Mount	N3* NEMA 3x3 N4 NEMA 4x4 N5* NEMA 5x5 N6 NEMA 6x6	Small 1L 1,600 lumens - Not available in 347-480V 3L 3,000 lumens - Not available in 347-480V 6L 6,500 lumens	Large 10L 10,000 lumens 14L 14,000 lumens 21L 21,500 lumens 28L 28,400 lumens	30K*** 3000K 40K 4000K 50K 5000K 57K*** 5700K	UL Universal 120-277V UH Universal 347-480V	BZ Bronze

* Not available with initial product launch. 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

*** Limited availability, consult factory

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



Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
14L*	10.5 lbs (4.8kg)	13.39" (340mm)	15.78" (401mm)	7.48" (190mm)	5.09" (129mm)	2.32" (59mm)
21L*	13.5 lbs (6.1kg)	14.37" (365mm)	15.18" (386mm)	8.86" (225mm)	5.09" (129mm)	2.25" (57mm)
28L*	17.2 lbs (7.8kg)	13.39" (340mm)	22.83" (580mm)	14.7" (360mm)	4.97" (126mm)	2.13" (54mm)

See page 5 for additional line drawings

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



US: lighting.cree.com

T (800) 236-6800 F (262) 504-5415

Rev. Date: V1 R6 03/08/2019

Canada: www.cree.com/canada



T (800) 473-1234 F (800) 890-7507

Product Specifications

CONSTRUCTION & MATERIALS

- Luminaire housing is rugged die cast aluminum with integral LED driver compartment is specifically designed for LED applications with advanced LED thermal management
- Housing and mounting accessories finished in polyester powder coat paint, 2.5 mil nominal thickness
- Mounting options (for 1L, 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 (14L, 21L and 28L) include:**
 - Adjustable arm and adjustable arm w/NEMA® 3-Pin photocell receptacle, trunnion mount, trunnion mount w/NEMA® 3-Pin photocell receptacle and trunnion mount w/ knockout provision for field-installed button type photocell (by others)
 - Extension arm accessory for adjustable arm and trunnion mount provides both a NEMA® 3-Pin photocell receptacle and a knockout provision for a field-installed occupancy sensor (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,
- Housing Weight:** 1L-2.6 lbs. (1.2kg), 3L-2.9 lbs. (1.3kg), 6L-3.2 lbs. (1.4kg), 10L-6.3 lbs. (2.9kg), 14L-7.0 lbs. (3.2kg), 21L-9.7 lbs. (4.4kg), 28L-13.4 lbs. (6.1kg)


OPTICS

- Mid-power LED array Floodlight optics are available in: spot (NEMA 3x3), medium flood (NEMA 4x4), medium-wide flood (NEMA 5x5) and wide flood (NEMA 6x6) for 3000K, 4000K, 5000K and 5700K 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 surge suppression protection standard
- Designed with 0-10V dimming capabilities. Controls by other. Dimming only available on 14L, 21L and 28L
- Refer to Dimming spec sheet for details
- 10V Source Current:** 0.20 mA
- Operating Temperature Range:** -30°C - +40°C (-22°F - +104°F)

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- RoHS compliant. Consult factory for additional details
- Certified to ANSI C136.31-2001, 1.5G vibration standards
-  **CA RESIDENTS WARNING:** Cancer and Reproductive Harm - 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
1L	12	N/A	0.12	0.07	0.06	0.05	N/A	N/A
3L	21	N/A	0.21	0.12	0.11	0.09	N/A	N/A
6L	40	40	0.4	0.23	0.20	0.17	0.14	0.10
10L	64	64	0.64	0.37	0.32	0.28	0.22	0.16
14L	93	93	0.93	0.54	0.47	0.40	0.32	0.23
21L	140	140	1.40	0.8	0.7	0.61	0.48	0.35
28L	186	186	1.86	1.07	0.93	0.81	0.64	0.47

* 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 ¹					
Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ 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

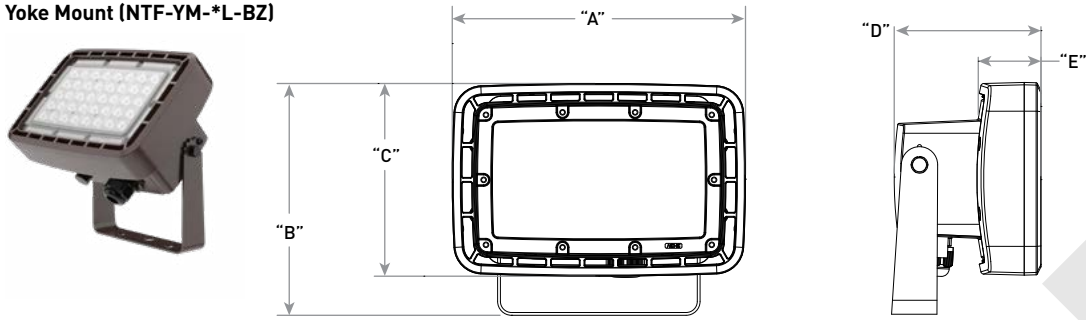
¹Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime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

²In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

³In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

Noctura™ LED Flood Luminaire

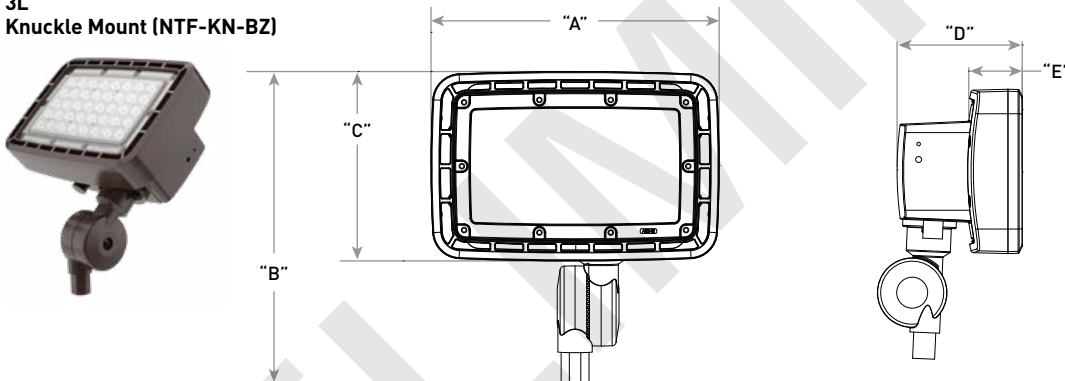
**3L
Yoke Mount (NTF-YM-*L-BZ)**



Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
1L	2.9 lbs (1.3kg)	7.68" (195mm)	5.81" (148mm)	4.53" (115mm)	3.7" (94mm)	1.7" (43mm)
3L	3.3 lbs. (1.5kg)	8.27" (210mm)	6.54" (166mm)	5.43" (138mm)	4.14" (105mm)	1.77" (45mm)
6L	3.6 lbs. (1.6kg)	9.45" (240mm)	6.67" (170mm)	5.71" (145mm)	4.14" (105mm)	1.77" (45mm)
10L	6.7 lbs (3.1kg)	10.63" (270mm)	7.19" (183mm)	5.91" (150mm)	4.38" (111mm)	2.28" (58mm)

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

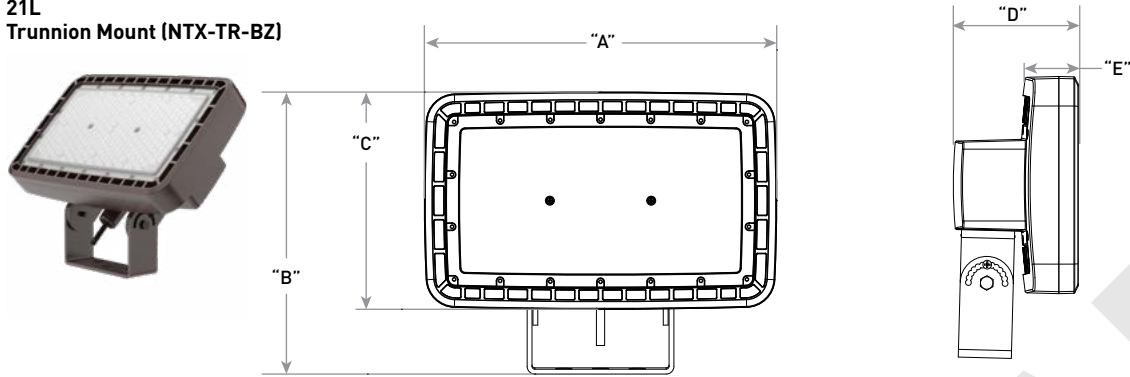
**3L
Knuckle Mount (NTF-KN-BZ)**



Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
1L	3.0 lbs. (1.3kg)	7.68" (195mm)	8.04" (204mm)	4.53" (115mm)	3.7" (94mm)	1.7" (43mm)
3L	3.3 lbs. (1.5kg)	8.27" (210mm)	8.91" (226mm)	5.43" (138mm)	4.14" (105mm)	1.77" (45mm)
6L	3.6 lbs. (1.6kg)	9.45" (240mm)	6.67" (170mm)	5.71" (145mm)	4.14" (105mm)	1.77" (45mm)
10L	6.7 lbs. (3.0kg)	10.63" (270mm)	9.26" (235mm)	5.91" (150mm)	4.38" (111mm)	2.28" (58mm)

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

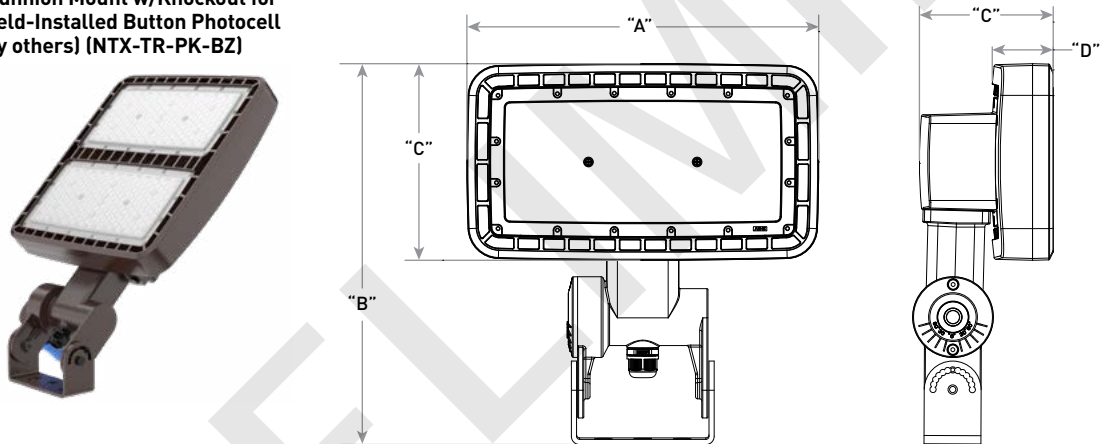
**21L
Trunnion Mount (NTX-TR-BZ)**



Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
14L	10.1 lbs. [4.6kg]	13.39" [340mm]	10.8" [275mm]	7.48" [190mm]	5.09" [129mm]	2.32" [59mm]
21L	12.8 lbs. [5.8kg]	14.37" [365mm]	11.35" [292mm]	8.86" [225mm]	5.09" [129mm]	2.25" [57mm]
28L	16.5 lbs. [7.5kg]	13.39" [340mm]	17.82" [453mm]	14.17" [360mm]	4.97" [126mm]	2.13" [54mm]

* 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)**



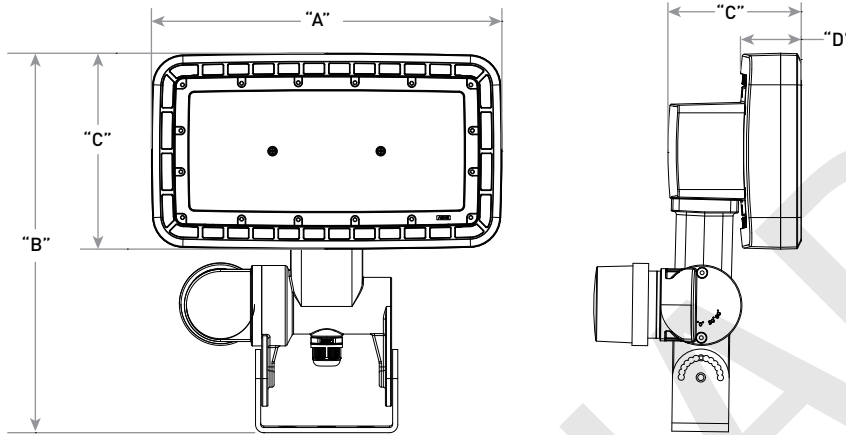
Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
14L	11.2 lbs. [5.1kg]	13.39" [340mm]	14.49" [368mm]	7.48" [190mm]	5.09" [129mm]	2.32" [59mm]
21L	13.9 lbs. [1.8kg]	14.37" [365mm]	15.18" [386mm]	8.86" [190mm]	5.09" [129mm]	2.25" [57mm]
28L	17.6 lbs. [8.0kg]	13.39" [340mm]	21.5" [546mm]	14.7" [360mm]	4.97" [126mm]	2.13" [54mm]

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

Noctura™ LED Flood Luminaire

**28L
Trunnion Mount w/Extension Arm and NEMA® 3-Pin Photocell Receptacle and a
knockout for an occupancy sensor (NTX-TR-BZ & NTX-TR-3R-BZ)**

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Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
14L	11.2 lbs. [5.1kg]	13.39" [340mm]	14.49" [368mm]	7.48" [190mm]	5.09" [129mm]	2.32" [59mm]
21L	13.9 lbs. [1.8kg]	14.37" [365mm]	15.18" [386mm]	8.86" [190mm]	5.09" [129mm]	2.25" [57mm]
28L	17.6 lbs. [8.0kg]	13.39" [340mm]	21.5" [546mm]	14.7" [360mm]	4.97" [126mm]	2.13" [54mm]

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

**L Adjustable Arm with 3-Pin Receptacle
NTX-AA-3R-BZ**

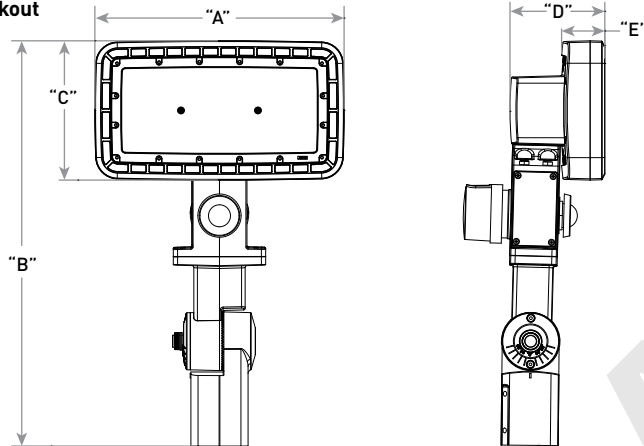
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Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
14L	10.8 lbs. [4.9kg]					
21L	13.3 lbs. [6.1kg]					
28L	17.2 lbs. [7.8kg]					

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

Noctura™ LED Flood Luminaire

14L
Adjustable Arm NEMA® 3-Pin Photocell
Receptacle and Occupancy Sensor Knockout
(NTX-AA-BZ w/NTX-3R-BZ)



Lumen Package	Weight*	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
14L	13.2 lbs. (6.0kg)	13.39" (340mm)	21.76" (553mm)	7.48" (190mm)	5.09" (129mm)	2.32" (59mm)
21L	15.9 lbs. (7.2kg)	14.37" (365mm)	22.45" (570mm)	8.86" (190mm)	5.09" (129mm)	2.25" (57mm)
28L	19.6 lbs. (8.9kg)	13.39" (340mm)	28.77" (731mm)	14.7" (360mm)	4.97" (126mm)	2.13" (54mm)

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

NEMA® 3 Flood Distribution				
Lumen Package	3000K		4000K/5000K/5700K	
	Initial Delivered Lumens*	Efficacy (LPW)	Initial Delivered Lumens*	Efficacy (LPW)
1L	1,520	127	1,620	135
3L	2,820	134	3,010	143
6L	5,900	148	6,300	158
10L	9,275	145	9,900	155
14L	13,275	143	14,150	152
21L	20,300	145	21,700	155
28L	26,800	144	28,600	154

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

NEMA® 4 Flood Distribution				
Lumen Package	3000K		4000K/5000K/5700K	
	Initial Delivered Lumens*	Efficacy (LPW)	Initial Delivered Lumens*	Efficacy (LPW)
1L	1,520	127	1,620	135
3L	2,820	134	3,010	143
6L	5,900	148	6,300	158
10L	9,275	145	9,900	155
14L	13,275	143	14,150	152
21L	20,300	145	21,700	155
28L	26,800	144	28,600	154

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

NEMA® 5 Flood Distribution				
Lumen Package	3000K		4000K/5000K/5700K	
	Initial Delivered Lumens*	Efficacy (LPW)	Initial Delivered Lumens*	Efficacy (LPW)
1L	1,520	127	1,620	135
3L	2,820	134	3,010	143
6L	5,900	148	6,300	158
10L	9,275	145	9,900	155
14L	13,275	143	14,150	152
21L	20,300	145	21,700	155
28L	26,800	144	28,600	154









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

NEMA® 6 Flood Distribution				
Lumen Package	3000K		4000K/5000K/5700K	
	Initial Delivered Lumens*	Efficacy (LPW)	Initial Delivered Lumens*	Efficacy (LPW)
10L	9,275	145	9,900	155
14L	13,275	143	14,150	152
21L	20,300	145	21,700	155
28L	26,800	144	28,600	154

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

PRELIMINARY

Luminaire EPA

Adjustable Arm Mount - NXT-AA-BZ; Weight: 14L: 14.52 lbs. (6.58kg); 21L: 17.23 lbs. (7.82kg); 28L: 20.90 lbs. (9.48kg)								
Lumen Package	Single	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	3 @ 180°	4 @ 90°	4 @ 180°
Tenon Configuration (0°-45° Tilt): If used with Cree tenons, please add tenon EPA with Luminaire EPA								
								
	PB-1A*; PT-1; PW-1A3**	PB-2A*; PB-2R2.375; PD- 2A4(180); PT-2(180); PW-2A3**	PB-2A*; PD- 2A4(90); PT-2(90)	PB-2A*; PD- 2A4(90); PT-2(90)	PB-3A*; PT-3(120)	PB-3A*; PB-3R2.375	PB-4A*(180)	PB-4A*(90); PB-4R2.375; PD-4A4(90); PT-4(90)
0° Tilt								
14L	0.54	1.08	1.08	1.62	1.62	1.62	2.16	2.16
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
10° Tilt								
14L	0.64	1.28	1.28	1.92	1.92	1.92	2.56	2.56
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
20° Tilt								
14L	0.72	1.44	1.44	2.16	2.16	2.16	2.88	2.88
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
30° Tilt								
14L	0.75	1.50	1.50	2.25	2.25	2.25	3.00	3.00
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
45° Tilt								
14L	0.77	1.54	1.54	2.31	2.31	2.31	3.08	3.08
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")

PRELIMINARY

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-3R2.375	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")

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

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

