

304 Series™

LED Parking Structure Luminaire

Product Description

Slim, low profile design. Luminaire is constructed from rugged die cast and extruded aluminum components. LED driver is mounted in a sealed weathertight center chamber that allows for access from below the luminaire. High performance aluminum heat sinks specifically designed for LED parking structure application.

Applications: Parking structures and low-medium bay general lighting

Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) Standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

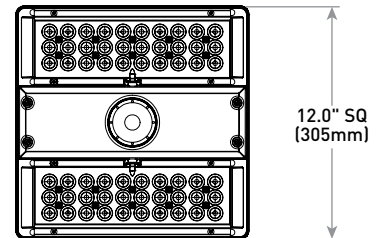
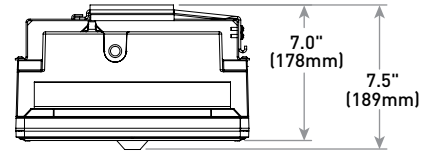
† See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed	
Bird Guard - For pendant or hook & cord mount only XA-XCPBRDGRD	For Hook & Cord Mount luminaires Locking Type Plug XA-L515P – 120V XA-L615P – 208/240V XA-L715P – 277V XA-L3720P – 347V Locking Type Receptacle XA-L515R – 120V XA-L615R – 208/240V XA-L715R – 277V XA-L720R – 347V Steady Lock - For eyebolt SL-C Hand-Held Remote XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required
For Pendant Mount luminaires Leveler - For 0-13° Sloped Ceilings XA-PNDTLVL** Fitting XA-PSFTG** Pendant Mount Kits - Includes conduit fitting and threaded pipe - Pendant height from ceiling surface to bottom of the luminaire; mounting accessories or surface boxes will add to overall height XA-PS12KIT** – 12" [305mm] XA-PS18KIT** – 18" [457mm] XA-PS22KIT** – 22" [559mm]	

**Must specify color

DM Mount



LED Count (x10)	Weight
04	20.4 lbs. [9.3kg]
06	20.8 lbs. [9.4kg]

Ordering Information

Example: PKG-304-5M-DM-04-E-UL-SV-700

PKG-304				E				
Product	Optic	Mounting	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options
PKG-304	5M Type V Medium 5S Type V Short PS Petroleum Symmetric SL Sparkle Petroleum 40 40° Flood	DM Direct HC Hook & Cord PD Pendant	04 06	E	UL Universal 120-277V UH Universal 347-480V	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA 700 700mA	DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed of specified drive current F Fuse - Available with UL voltage only - When code dictates fusing use time delay fuse - Refer to ML spec sheet for availability with ML options J Alternate Junction Box Mounting - For direct mount only - Alternate bracket to fit 4" [102mm] square and RAC0279 J-Box ML Multi-Level - Refer to ML spec sheet for details - Intended for downlight applications at 0° tilt PML Programmable Multi-Level - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire



Rev. Date: V2.07/27/2016



US: lighting.cree.com/lighting

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

Canada: www.cree.com/canada

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

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile design
- Constructed from rugged die cast and extruded aluminum components
- LED driver is mounted in a sealed weathertight center chamber that allows for access from below the luminaire
- High performance heat sinks specifically designed for LED parking structure application
- Direct mounting bracket is designed to mount directly over existing single gang and octagonal junction boxes for direct mount
- Hook and cord mount provided with spring lock hook for mounting and 1.5' (0.5m) of cord
- Pendant mount includes 36" (419mm) cord out of the luminaire and is intended to be mounted by 3/4 IP pendant (by others)
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultradurable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Weight Charts on pages 1 and 5

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
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used
- **10V Source Current:** 0.15mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529
- Consult factory for CE Certified products
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15 standards for conducted and radiated emissions
- DLC qualified when ordered with 5M or 5S optics. Please refer to www.designlights.org/QPL for most current information
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- RoHS Compliant. Consult factory for additional details
- Meets Buy American requirements within ARRA

Electrical Data*							
LED Count (x10)	System Watts 120-480V	Total Current					
		120V	208V	240V	277V	347V	480V
350mA							
04	46	0.39	0.24	0.22	0.21	0.15	0.12
06	69	0.57	0.34	0.30	0.27	0.21	0.16
525mA							
04	71	0.59	0.35	0.31	0.28	0.21	0.16
06	101	0.84	0.49	0.43	0.38	0.30	0.22
700mA							
04	94	0.79	0.46	0.40	0.36	0.28	0.21
06	135	1.14	0.65	0.57	0.50	0.40	0.29

* Electrical data at 25°C (77°F)

Recommended 304 Series™ Lumen Maintenance Factors (LMF) 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	0.99	0.97	0.95	0.93
10°C (50°F)	1.03	0.98	0.96	0.94	0.92
15°C (59°F)	1.02	0.97	0.95	0.93	0.91
20°C (68°F)	1.01	0.96	0.94	0.92	0.90
25°C (77°F)	1.00	0.95	0.93	0.91	0.89

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing
² In 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

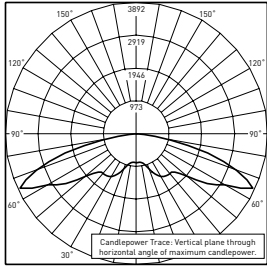
³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip



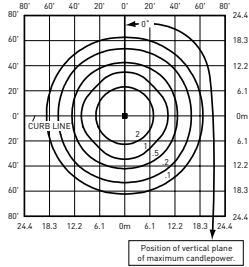
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/parking-structure/304-series-2>

5M



ITL Test Report #: 77285
 PKG-304-5M-**-06-E-UL-700-40K
 Initial Delivered Lumens: 11,681

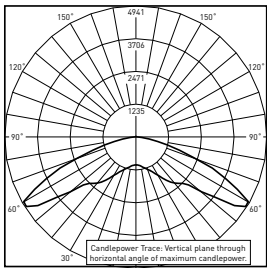


PKG-304-5M-**-06-E-UL-700-40K
 Mounting Height: 15' (4.6m) A.F.G.
 Initial Delivered Lumens: 11,625
 Initial FC at grade

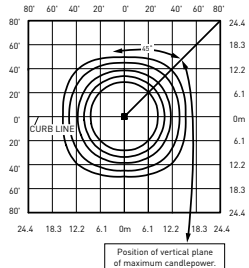
Type V Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
04	4,595	B3 U1 G1	4,771	B3 U1 G1
06	6,838	B3 U1 G1	7,101	B3 U1 G2
525mA				
04	6,433	B3 U1 G1	6,680	B3 U1 G1
06	9,574	B3 U1 G2	9,942	B3 U1 G2
700mA				
04	7,811	B3 U1 G2	8,111	B3 U1 G2
06	11,625	B4 U1 G2	12,072	B4 U1 G2

* Initial delivered lumens at 25°C (77°F)
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

5S



ITL Test Report #: 77876
 PKG-304-5S-**-06-E-UL-700-40K
 Initial Delivered Lumens: 12,738



PKG-304-5S-**-06-E-UL-700-40K
 Mounting Height: 15' (4.6m) A.F.G.
 Initial Delivered Lumens: 12,917
 Initial FC at grade

Type V Short Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
04	5,105	B2 U0 G1	5,302	B2 U0 G1
06	7,598	B3 U0 G1	7,890	B3 U0 G1
525mA				
04	7,147	B3 U0 G1	7,422	B3 U0 G1
06	10,637	B3 U0 G2	11,046	B3 U0 G2
700mA				
04	8,679	B3 U0 G1	9,013	B3 U0 G1
06	12,917	B3 U0 G2	13,413	B3 U0 G2

* Initial delivered lumens at 25°C (77°F)
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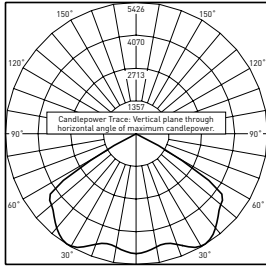


304 Series™ LED Parking Structure Luminaire

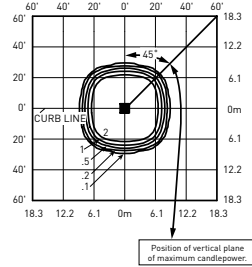
Photometry

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PS



ITL Test Report #: 76940
CAN-304-PS-**-06-E-UL-700-40K
Initial Delivered Lumens: 13,581

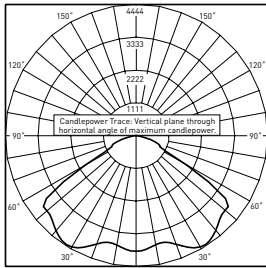


PKG-304-PS-**-06-E-UL-700-40K
Mounting Height: 15' (4.6m) A.F.G.
Initial Delivered Lumens: 13,204
Initial FC at grade

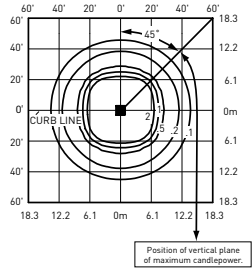
Petroleum Symmetric Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
04	5,219	B2 U0 G0	5,419	B2 U0 G0
06	7,767	B3 U0 G0	8,066	B3 U0 G0
525mA				
04	7,306	B3 U0 G0	7,587	B3 U0 G0
06	10,874	B3 U0 G0	11,292	B3 U0 G0
700mA				
04	8,872	B3 U0 G0	9,213	B3 U0 G0
06	13,204	B3 U0 G0	13,712	B3 U0 G0

* Initial delivered lumens at 25°C (77°F)
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SL



ITL Test Report #: 77415
CAN-304-SL-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,707



PKG-304-SL-**-06-E-UL-700-40K
Mounting Height: 15' (4.6m) A.F.G.
Initial Delivered Lumens: 12,773
Initial FC at grade

Sparkle Petroleum Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
04	5,048	B2 U0 G1	5,243	B2 U0 G1
06	7,514	B3 U0 G1	7,803	B3 U0 G1
525mA				
04	7,068	B2 U0 G1	7,340	B2 U0 G1
06	10,519	B3 U0 G1	10,924	B3 U0 G1
700mA				
04	8,582	B3 U0 G1	8,912	B3 U0 G1
06	12,773	B3 U0 G1	13,264	B3 U0 G1

* Initial delivered lumens at 25°C (77°F)
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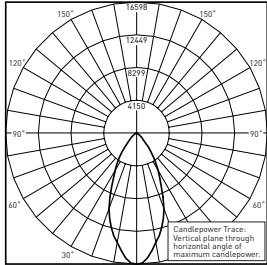


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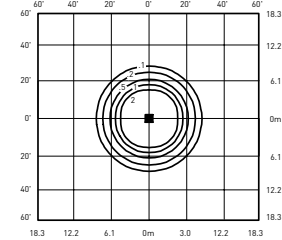
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40°



ITL Test Report #: 78011
CAN-304-40-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,497

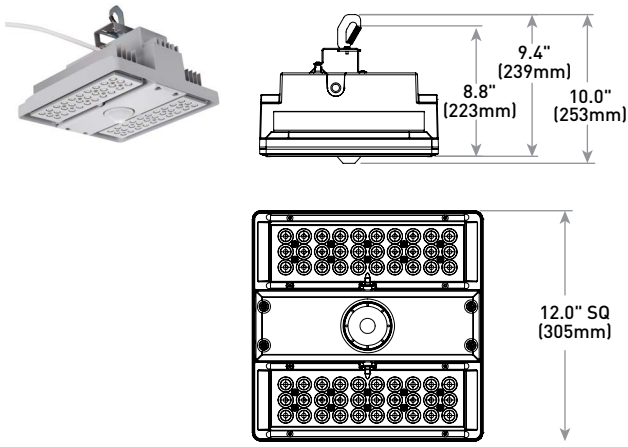


PKG-304-40-**-06-E-UL-700-40K
Mounting Height: 15' (4.6m) A.F.G.
Initial Delivered Lumens: 12,917
Initial FC at grade

40° Flood Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
04	5,105	N/A	5,302	N/A
06	7,598	N/A	7,890	N/A
525mA				
04	7,147	N/A	7,422	N/A
06	10,637	N/A	11,046	N/A
700mA				
04	8,679	N/A	9,013	N/A
06	12,917	N/A	13,413	N/A

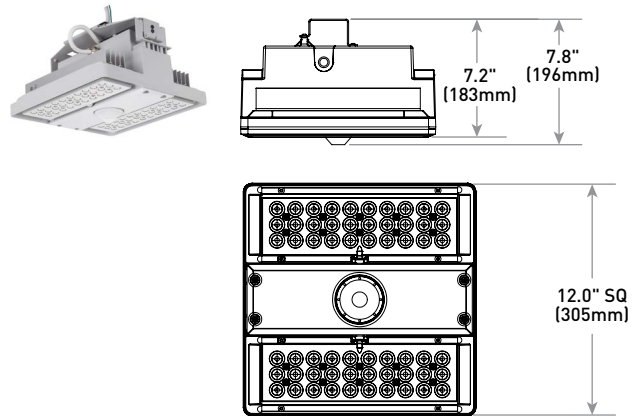
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HC Mount



LED Count (x10)	Weight
04	18.1 lbs. (8.2kg)
06	18.6 lbs. (8.4kg)

PD Mount



LED Count (x10)	Weight
04	18.5 lbs. (8.4kg)
06	18.8 lbs. (8.5kg)