

304 Series™

LED Recessed Canopy Luminaire Upgrade Kits

Product Description

Energy-efficient, long-life LED upgrade kits for surface mounted HID canopy luminaires. Reduces total ownership costs. Luminaire mounts directly to the existing HID housing by replacing existing door frame and lens assembly. Optical unit is constructed of high performance aluminum extrusion with rugged die cast end caps for exceptional performance and durability. Luminaire is provided with two suspension stainless steel aircraft cables to allow assembly to hinge open for hands-free field wiring.

Applications: Petroleum stations, convenience stores, drive-thru banks and restaurants, retail and grocery

Performance Summary

Patented NanoOptic® Product Technology

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

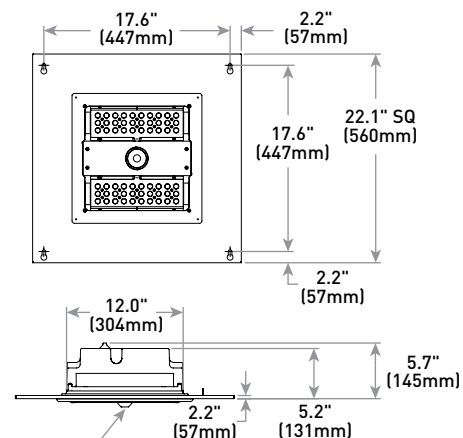
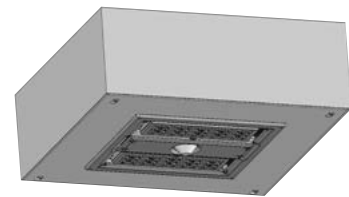
CRI: Minimum 70 CRI

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

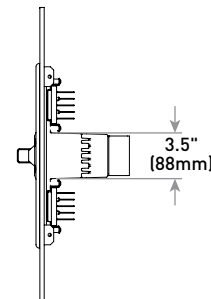
Limited Warranty†: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

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

RT1



Multi-level Sensor location
(ordered as an option)



Weight

22.5 lbs. (10.2kg)

Ordering Information

Example: CAN-304-5M-RT1-04-E-UL-SV-350

CAN-304				E				
Product	Optic	Mounting	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options
CAN-304	5M Type V Medium 5S Type V Short PS Petroleum Symmetric SL Sparkle Petroleum	RT1 Elsco Franciscan Upgrade Kit - For nominal 23.8" x 23.8" (603mm x 603mm) shoebox luminaires RT2 LSI Dakota or Masters Upgrade Kit - For nominal 23" x 23" (584mm x 584mm) shoebox luminaires RT3 Whiteway Riviera or Rig-A-Lite Upgrade Kit - For nominal 21" x 21" (533mm x 533mm) shoebox luminaires RT4 Elsco Merrit Upgrade Kit - For nominal 20" x 20" (508mm x 508mm) shoebox luminaires RT5 Jet Philips Upgrade Kit - For nominal 22" x 22" (559mm x 559mm) shoebox luminaires	04 06	E	UL Universal 120-277V	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA	F Fuse - When code dictates fusing use time delay fuse - Refer to ML spec sheet for availability with ML option ML Multi-Level - Refer to Multi-Level spec sheet for details 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire



US: lighting.cree.com

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

Rev. Date: V1 10/03/2018

Canada: www.cree.com/canada



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

Product Specifications


CONSTRUCTION & MATERIALS

- Energy efficient, long life LED upgrade for surface mounted HID canopy luminaires
- Reduces total ownership costs
- Luminaire mounts directly to the existing HID housing by replacing the existing door frame and lens assembly
- 1.5 ft. (0.4m) of cord provided for ease of wiring and installation without need to open luminaire
- Luminaire is mounted to adaptor panel in field. Panel is heavy gauge die-formed steel with exclusive Colorfast DeltaGuard® powder coat finish
- Optical unit is constructed of high performance extrusion with rugged die cast end caps for exceptional performance and durability
- Complete panel assembly is secured to the existing housing with 4 corner brackets and stainless steel screws
- Luminaire provided with two suspension stainless steel aircraft cables to allow panel assembly to hinge open and allow for hands-free field wiring
- Field adjustable drive current between 350mA, 525mA and 700mA
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Dimensions and Weight Chart on pages 1, 5 and 6

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V, 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

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Classified for use with:
 - RT1 - ElSCO Franciscan luminaires
 - RT2 - LSI Dakota or Masters luminaires
 - RT3 - Whiteway Riviera or Rig-A-Lite luminaires
 - RT4 - ElSCO Merrit luminaires
 - RT5 - Jet Philips luminaires
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets FCC Part 15 standards for conducted and radiated emissions
- RoHS Compliant. Consult factory for additional details
- Meets Buy American requirements within ARRA
-  **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Electrical Data*

LED Count (x10)	System Watts 277V	Total Current			
		120V	208V	240V	277V
350mA					
04	46	0.39	0.24	0.22	0.21
06	69	0.57	0.34	0.30	0.27
525mA					
04	71	0.59	0.35	0.31	0.28
06	101	0.84	0.49	0.43	0.38

* 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 are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

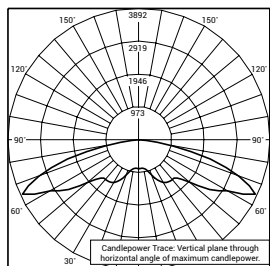
² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

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

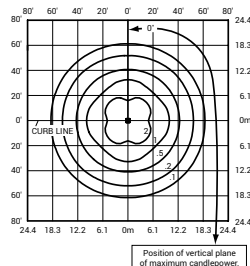
Photometry

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/canopy-and-soffit/304-series-1#>

5M



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



CAN-304-5M-**-06-E-UL-525-40K
 Mounting Height: 15' (4.6m) A.F.G.
 Initial Delivered Lumens: 9,563
 Initial FC at grade

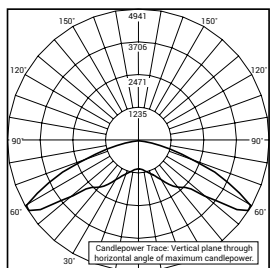
Type V Medium Distribution

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	4,600	B3 U1 G1	4,777	B3 U1 G1
06	6,831	B3 U1 G1	7,094	B3 U1 G2
525mA				
04	6,441	B3 U1 G1	6,688	B3 U1 G1
06	9,563	B3 U1 G2	9,931	B3 U1 G2

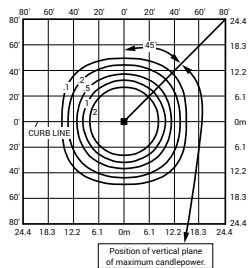
* Initial delivered lumens at 25°C (77°F)

** 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



CAN-304-5S-**-06-E-UL-525-40K
 Mounting Height: 15' (4.6m) A.F.G.
 Initial Delivered Lumens: 10,626
 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	5,112	B2 U1 G1	5,308	B2 U1 G1
06	7,590	B3 U1 G1	7,882	B3 U1 G1
525mA				
04	7,156	B3 U1 G1	7,432	B3 U1 G1
06	10,626	B3 U1 G2	11,035	B3 U1 G2

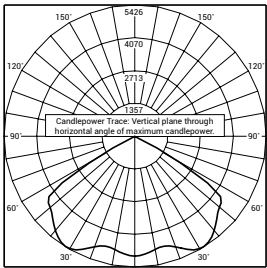
* Initial delivered lumens at 25°C (77°F)

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

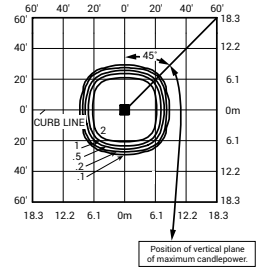
Photometry

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/canopy-and-soffit/304-series-1#>

PS



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

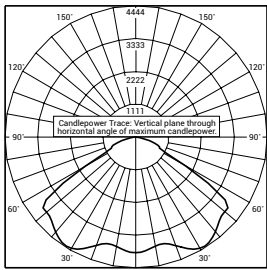


CAN-304-PS-**-06-E-UL-525-40K
Mounting Height: 15' (4.6m) A.F.G.
Initial Delivered Lumens: 10,862
Initial FC at grade

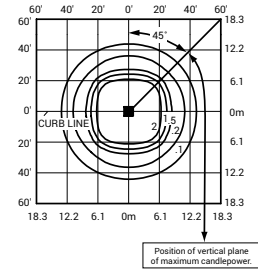
Petroleum Symmetric Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
04	5,225	B2 U0 G0	5,426	B2 U0 G0
06	7,759	B3 U0 G0	8,057	B3 U0 G0
525mA				
04	7,315	B3 U0 G0	7,597	B3 U0 G0
06	10,862	B3 U0 G0	11,280	B3 U0 G0

* 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

SL



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



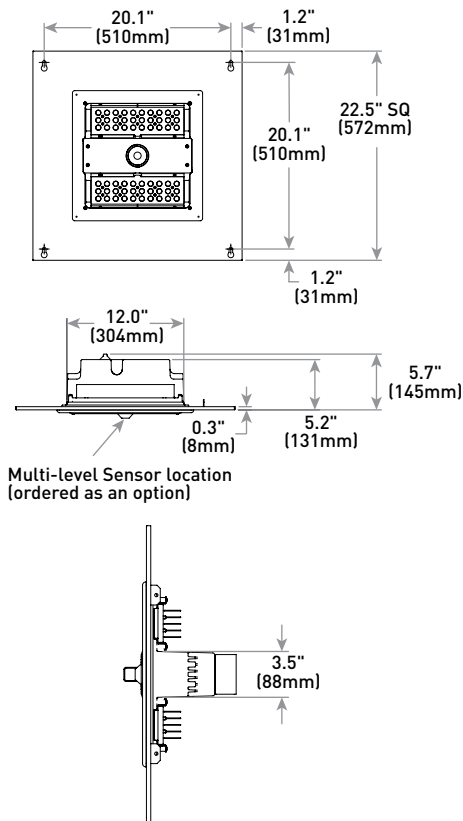
CAN-304-SL-**-06-E-UL-525-40K
Mounting Height: 15' (4.6m) A.F.G.
Initial Delivered Lumens: 10,508
Initial FC at grade

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	5,055	B2 U0 G1	5,249	B2 U0 G1
06	7,506	B2 U0 G1	7,794	B3 U0 G1
525mA				
04	7,077	B2 U0 G1	7,349	B2 U0 G1
06	10,508	B3 U0 G1	10,912	B3 U0 G1

* 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

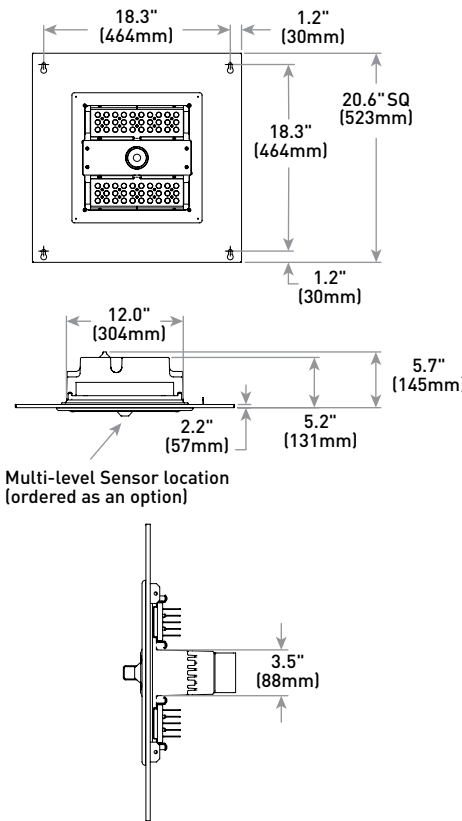


RT2



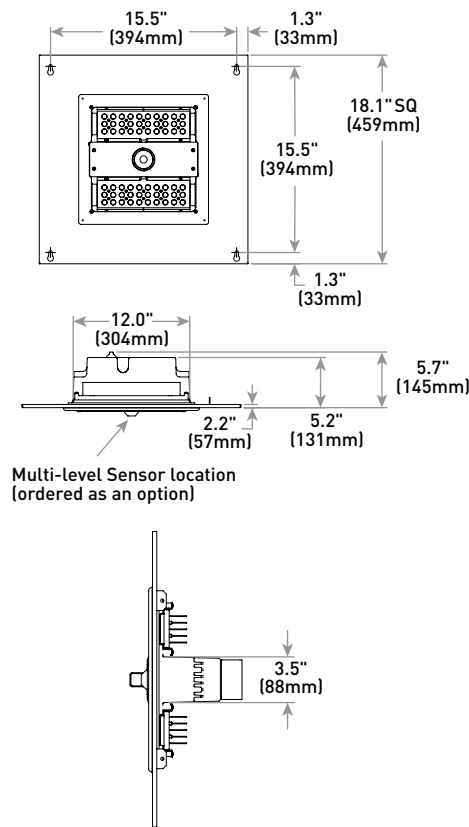
Weight
22.5 lbs. (10.2kg)

RT3



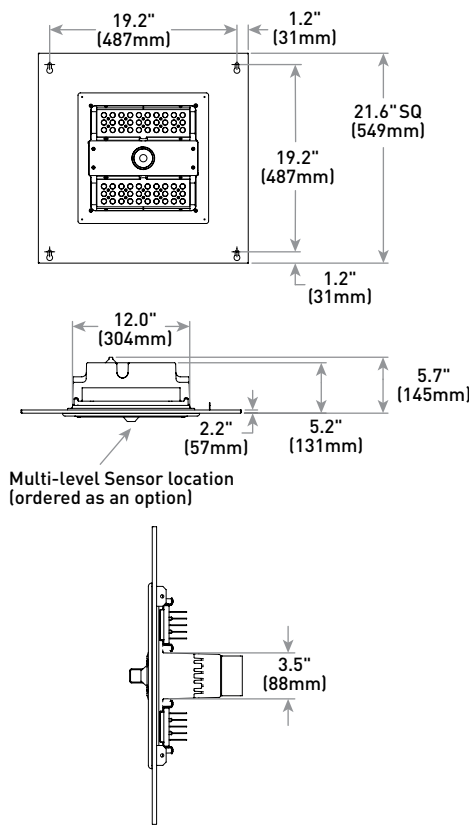
Weight
22.5 lbs. (10.2kg)

RT4



Weight
22.5 lbs. (10.2kg)

RT5



Weight
22.5 lbs. (10.2kg)