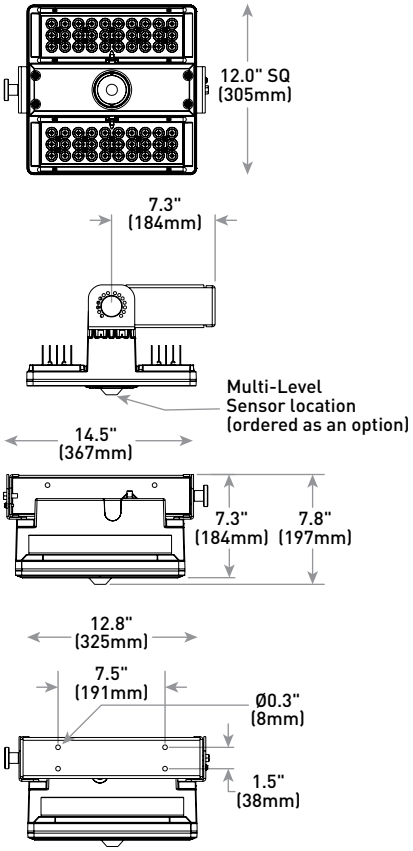
304 Series™

LED Flood 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 heat sinks specifically designed for LED floodlight application. Luminaire mounts with stainless steel adjustable yoke mount which allows for +/- 90˚ adjustment in 5˚ increments.

Applications: Underpasses and sign lighting



Performance Summary

- Patented NanoOptic® Product Technology
- Assembled 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
Hand-Held Remote XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

LED Count (x10)	Weight
04	23 lbs. (10.4kg)
06	23 lbs. (10.4kg)

Ordering Information

Example: FLD-304-2M-YM-04-E-UL-SV-350

FLD-304		YM		E				
Product	**Optic**	**Mounting**	**LED Count (x10)**	**Series**	**Voltage**	**Color Options**	**Drive Current**	**Options**
FLD-304	**2M** Type II Medium **3M** Type III Medium **5M** Type V Medium **5S** Type V Short **N6** NEMA® 6 **SL** Sparkle Petroleum **SN** Sign **15** 15˚ Flood **25** 25˚Flood **40** 40˚ Flood **70** 70˚Flood	**YM** Yoke	**04** **06**	**E**	**UL** Universal 120-277V **UH** Universal 347-480V	**SV** Silver **BK** Black **BZ** Bronze **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 specified drive current **F Fuse** - When code dictates fusing, use time delay fuse - Refer to PML spec sheet for availability with PML options - Available with UL voltage only **PML Programmable Multi-Level, 10-30' Mounting Height** - 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

CONSTRUCTION & MATERIAL

- 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
- 3' (0.9m) SEOW cord exits street side of luminaire through 1/2" (13mm) NPT cable gland
- High performance aluminum heat sinks specifically designed for LED floodlight applications
- Luminaire mounts with stainless steel adjustable yoke which allows for +/- 90˚adjustment in 5˚ increments
- 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:** 40 LED: 23 lbs. (10.4kg); 60 LED: 23 lbs. (10.4kg)

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
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **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
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- 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 Buy American requirements within ARRA
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- RoHS compliant. Consult factory for additional details
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Electrical Data*

LED Count (x10)	System Watts 120-480V	Total Current (A)					
		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). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

304 Series™ Ambient Adjusted Lumen Maintenance[1]

Ambient	Initial LMF	25K hr Projected[2] LMF	50K hr Projected[2] LMF	75K hr Calculated[3] LM	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. 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

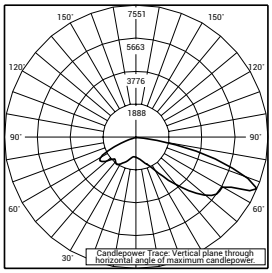
[2] In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ([DUT) i.e. the packaged LED chip)

[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)

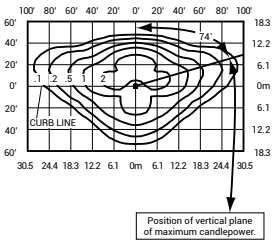
Photometry

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: www.cree.com/Lighting/Tools-and-Support/Exterior-IES-Configuration-Tool

2M



ITL Test Report #: 77237
STR-LWY-2M-**-06-E-UL-700-40K
Initial Delivered Lumens: 11,094

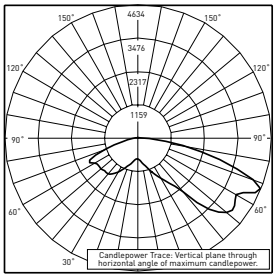


FLD-304-2M-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 11,476
Initial FC at grade

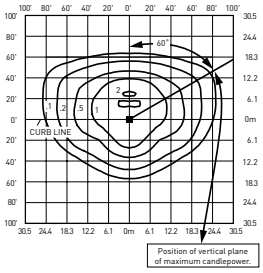
Type II Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
04	4,368	B1 U0 G1	4,536	B2 U0 G2
06	6,501	B2 U0 G2	6,751	B2 U0 G2
525mA				
04	6,115	B2 U0 G2	6,350	B2 U0 G2
06	9,101	B3 U0 G3	9,451	B3 U0 G3
700mA				
04	7,425	B2 U0 G2	7,711	B2 U0 G2
06	11,051	B3 U0 G3	11,476	B3 U0 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

3M



CESTL Test Report #: 2013-0068
STR-LWY-3M-**-06-E-UL-700-40K
Initial Delivered Lumens: 10,430



FLD-304-3M-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 10,880
Initial FC at grade

Type III 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	4,141	B1 U0 G1	4,300	B1 U0 G1
06	6,163	B2 U0 G2	6,400	B2 U0 G2
525mA				
04	5,797	B2 U0 G2	6,020	B2 U0 G2
06	8,628	B2 U0 G2	8,960	B2 U0 G2
700mA				
04	7,039	B2 U0 G2	7,310	B2 U0 G2
06	10,477	B3 U0 G3	10,880	B3 U0 G3

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

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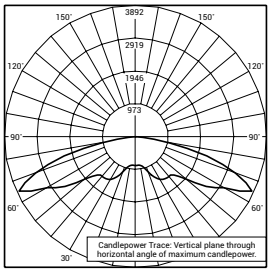
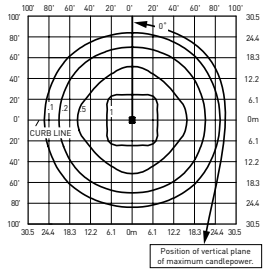
5M



ITL Test Report #: 78147
PKG-304-5M-**-06-E-UL-700
Initial Delivered Lumens: 12,508



FLD-304-5M-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 12,072
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 U0 G1	4,771	B3 U0 G1
06	6,838	B3 U0 G2	7,101	B3 U0 G2
525mA				
04	6,433	B3 U0 G2	6,680	B3 U0 G2
06	9,574	B3 U0 G2	9,942	B3 U0 G2
700mA				
04	7,811	B3 U0 G2	8,111	B3 U0 G2
06	11,625	B4 U0 G2	12,072	B4 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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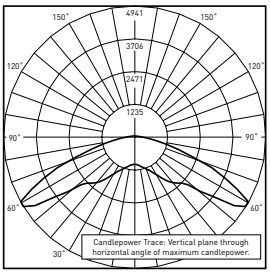
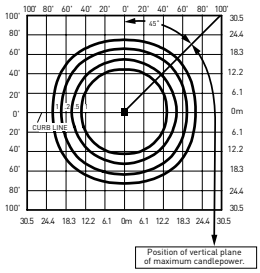
5S



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



FLD-304-5S-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,413
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). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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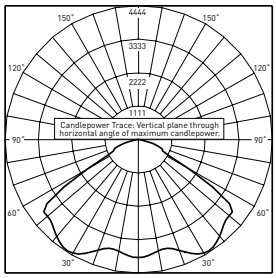
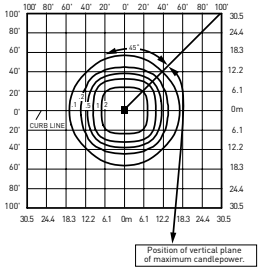
SL



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



FLD-304-SL-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,264
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). Actual production yield may vary between -10 and +10% of initial delivered lumens
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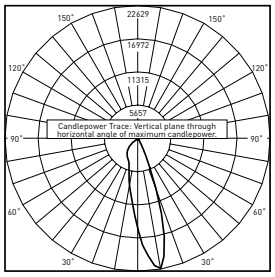
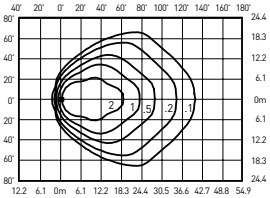
SN



RESTL Test Report #: 2014-0013
FLD-EDG-SN-**-06-E-UL-700-40K
Initial Delivered Lumens: 11,885



FLD-EDG-SN-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 12,370
Initial FC at grade

Sign Optic Distribution		
LED Count (x10)	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*
350mA		
04	4,708	4,889
06	7,007	7,277
525mA		
04	6,591	6,845
06	9,810	10,187
700mA		
04	8,004	8,312
06	11,912	12,370

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

Photometry

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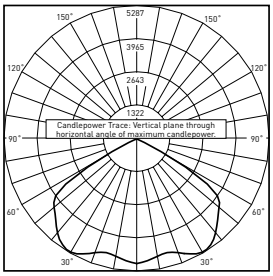
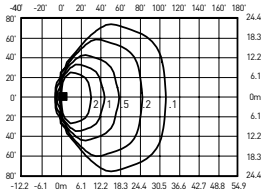
N6



RESTL Test Report #: 2014-0014
FLD-EDG-N6-**-06-E-UL-700-40K
Initial Delivered Lumens: 13,253

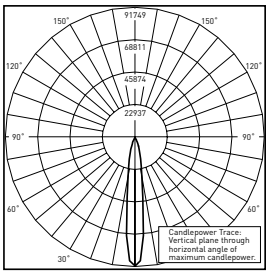


FLD-304-N6-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 13,712
Initial FC at grade

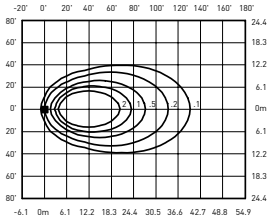
NEMA® 6 Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
04	5,219	5,419
06	7,767	8,066
525mA		
04	7,306	7,587
06	10,874	11,292
700mA		
04	8,872	9,213
06	13,204	13,712

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

15°



RESTL Test Report #: 2014-0004
FLD-EDG-15-**-06-E-UL-700-40K
Initial Delivered Lumens: 13,035



FLD-304-15-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 13,712
Initial FC at grade

15° Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
04	5,219	5,419
06	7,767	8,066
525mA		
04	7,306	7,587
06	10,874	11,292
700mA		
04	8,872	9,213
06	13,204	13,712

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

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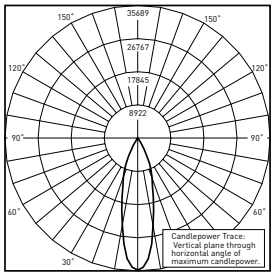
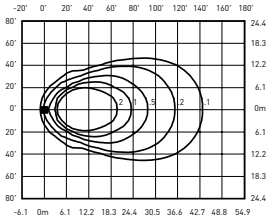
25˚



RESTL Test Report #: 2014-0006
FLD-EDG-25-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,924

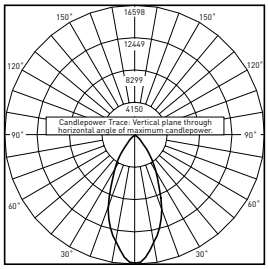


FLD-304-25-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 13,712
Initial FC at grade

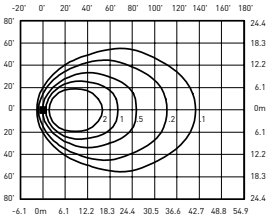
25˚ Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
04	5,219	5,419
06	7,767	8,066
525mA		
04	7,306	7,587
06	10,874	11,292
700mA		
04	8,872	9,213
06	13,204	13,712

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

40˚



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



FLD-304-40-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 13,413
Initial FC at grade

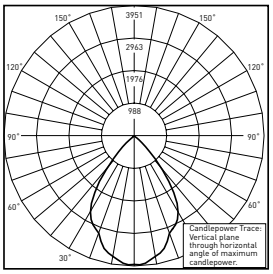
40˚ Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
04	5,105	5,302
06	7,598	7,890
525mA		
04	7,147	7,422
06	10,637	11,046
700mA		
04	8,679	9,013
06	12,917	13,413

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

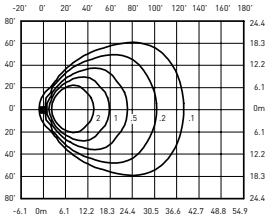
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: www.cree.com/Lighting/Tools-and-Support/Exterior-IES-Configuration-Tool

70˚



CESTL Test Report #: 2014-0007
FLD-EDG-70-**-04-E-UL-350-40K
Initial Delivered Lumens: 4,734



FLD-304-70-**-06-E-UL-700
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 12,221
Initial FC at grade

70˚ Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
04	4,651	4,830
06	6,923	7,189
525mA		
04	6,512	6,762
06	9,692	10,064
700mA		
04	7,907	8,211
06	11,768	12,221

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

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