NOTES

PG-ENLIGHTEN IS NEITHER LICENSED NOR INSURED TO DETERMINE CODE COMPLIANCE. CODE COMPLIANCE REVIEW BY OTHERS. FIXTURE TYPES AND QUANTITIES BASED ON PROVIDED LAYOUT AND DRAWINGS ARE FOR REFERENCE ONLY. TYPES AND QUANTITIES MAY CHANGE WITH FUTURE REVISIONS.

FIXTURE TYPES AND QUANTITIES MAY CHANGE BASED ON UNKNOWN OBSTRUCTIONS OR FIELD CONDITIONS. THESE CHANGES MAY RESULT IN AN INCREASED QUANTITY OF FIXTURES.

RENDER IMAGES ARE NOT TO SCALE AND PROVIDED SOLELY TO ILLUSTRATE

Luminaire Sche	edule							
Symbol	Qty	Tag	Manufacturer	Label	Arrangement	Total Lamp Lumens	LLF	Description
	18	FO1	LEDRA BRANDS	NU4-RD-SW-20LM-30K-80-HET60-WH-WH	Single	N.A.	0.900	NU4-RD-SW-20LM-30K-80-HET60-WH-WH
	18	F02	Insight Lighting	SSM_MO_40k_55	Single	N.A.	0.450	SSM_MO_40k_55°_WM_UNV_DIM
<b>+</b>	<u> </u>	F03	Focal Point, LLC	FSM4LWLS-AS-275LF-35K-1C-UNV-	Single	N.A.	0.900	FSM4LWLS-AS-275LF-35K-1C-UNV-XXX-XX-XX-WH-4FT
+	5	FO4	BEACON - HOL - CURRENT	RFL3-90L-50-4K7-M-UNV-K-FINISH	Single	N.A.	0.900	RFL3-90L-50-4K7-M-UNV-K-FINISH
<b>→</b>	3	F05	BEACON - HOL - CURRENT	TRP2-D-50-4K7-FT	Single	N.A.	0.900	TRP2-D-50-4K7-FT

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Asphalt_Planar	Illuminance	Fc	2.56	21.1	0.0	N.A.	N.A.
Pedestrian Ramp	Illuminance	Fc	N.A.	N.A.	N.A.	N.A.	N.A.
RESIDENTIAL PROP LINE	Illuminance	Fc	0.09	0.1	0.0	N.A.	N.A.

LIGHTING SCHEDULE AND SUMMARY: NTS



SITE ILLUMINATION CALC - 1/16" = 1'-0"



BRADY SCHENKE
brady.schenkel@pg-enlighter
260.519.0867 REV1 - | 0 | m | REVISIONS

PAGE 1 OF 1

PROJECT NAME:
ARLINGTON

PG ENLIGHTEN 500 QUAIL RIDGE DRIVE WESTMONT, IL 60559 WWW.PG-ENLIGHTEN.COM

#### LIGHT FIXTURE SCHEDULE

REFER TO PRODUCT SPECIFICATION SHEETS FOR ADDITIONAL INFORMATION - SPECIFIER TO CONFIRM PRODUCT NUMBERS

/PE	DESCRIPTION	MANUFACTURER	PRODUCT NUMBER	WATTS	DIMMING TYPE NOTES	CONTACT PERSON	
F01	4" Recessed Round	Alphabet EcoNU 4" RD	NU4-RD-SW-20LM-4K-80-HET60-WH-WH-IC -UNV-DIM10	16	0-10V	BRADY SCHENKEL brady.schenkel@pg-enlighten.com 260-519-0867	
			https://alphabetlighting.com/home/product/nu4rd/			255 517 5567	
F02	Sconce	Insight Lighting Scope Medium Sconce	SSM-DN-LO-NA-NA-4k-55°-WM-UNV-DIM-TBL	10	0-10V FINSISH - Per Arch	BRADY SCHENKEL brady.schenkel@pg-enlighten.com 260-519-0867	
			https://insightlighting.com/products/scope-medium-sconce-wl/				
F03	4" Wet surface Asymetric Linear	Focal Point Seem 4	FSM4LWLS-AS-275LF-4K-1C-UNV-LD1-SM-WH-LENGTH	2.4 / FT	0-10V LENGTH - Per drawings	BRADY SCHENKEL brady.schenkel@pg-enlighten.com 260-519-0867	
			https://www.focalpointlights.com/products/surface-mount-suspended-linear/seem-4-led-direct-suspended-linear-suspended-			200 017 0007	
F04	Area Flood	BEACON - HOL - CURRENT RFL3 Ratio Floodlight	RFL3-90L-50-4K7-M-UNV-K-BLT	50	0-10V FINSISH - Per Arch	BRADY SCHENKEL brady.schenkel@pg-enlighten.com 260-519-0867	
			https://www.currentlighting.com/outdoor-lighting/rfl2-ratio-floodlight/3236081				
F05	Wall Area Flood	BEACON - HOL - CURRENT TRP2 GeoPak	TRP2-D-50-4K7-FT-UNV-BL	50	0-10V FINSISH - Per Arch	BRADY SCHENKEL brady.schenkel@pg-enlighten.com 260-519-0867	
			https://www.currentlighting.com/outdoor-lighting/trp2-geopak/2518916#documents	'			

GENERAL NOTES

CONTRACTOR TO VERIFY QUANTITIES & LENGTH AND VERIFY FIELD AND SPECIFIED INFORMATION AS REQUIRED SCHEDULE IS PROVIDED FOR REFERENCE ONLY – SEE ISSUED CONTRACT DRAWING SET FOR FINAL INFORMATION

ALL MOUNTING LOCATIONS AND CONDITIONS PER ARCHITECTURAL SET

CATALOG NUMBERS IN RED TO BE CONFIRMED BY PURCHASER AND MAY ALTER PRICING OR LEAD TIMES INFORMATION IS SUBJECT TO CHANGE WITHOUT NOTICE FROM MANUFACTURERS

# NU4

### 4" Round Downlight Standard White



















Trimless Millwork

#### PROJECT INFORMATION JOB NAME ORDERING CODE

(Note: Specifications are subject to change without notice)					
14mn	1 COB PERFORMANCE DA	TA			
LED LIGHT Engine	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE			
10LM	800LM @30K/80CRI	9W			
15LM	1200LM @30K/80CRI	14W			
20LM	1600LM @30K/80CRI	16W			
25LM	2000LM @30K/80CRI	20W			
30LM	2400LM @30K/80CRI	24W			
35LM	2620LM @30K/80CRI	28W			
40LM	3000LM @30K/80CRI	32W			
10LM	670LM @30K/90/CRI	9W			
15LM	1010LM @30K/90/CRI	14W			
20LM	1350LM @30K/90/CRI	16W			
25LM	1700LM @30K/90/CRI	20W			
30LM	2020LM @30K/90/CRI	24W			
35LM	2210LM @30K/90/CRI	28W			
40LM	2500LM @30K/90/CRI	32W			

30° - 70° BEAM

10° BEAM (Note: Specifications are subject to change without notice)					
9mm COB PERFORMANCE DATA					
ED LIGHT Engine	NOMINAL DELIVERED LUMENS	SYSTEM Wattage			
10LM	740LM @30K/80CRI	9W			
15LM	1145LM @30K/80CRI	14W			
20LM	1525LM @30K/80CRI	16W			
25LM	1900LM @30K/80CRI	20W			
30LM	2285LM @30K/80CRI	24W			
10LM	620LM @30K/90/CRI	9W			
15LM	960LM @30K/90/CRI	14W			
20LM	1280LM @30K/90/CRI	16W			
25LM	1605LM @30K/90/CRI	20W			
30LM	1900LM @30K/90/CRI	24W			
Notes Delivered lumens based on S10 optic with no lens, (see page 2)					

eldoLED

nLiGHT

Notes



Delivered lumens based on WH70

optic with no lens, (see page 2)

**CAS**MBI

#### **FEATURES**

- Thermally optimized for LED longevity
- 3/4" bezel regress with 1/16" micro flange
- 10° 70° optical beam control
- UGR < 15
- Multiple mounting, glare control options, trims, and finishes available

#### **DIMMING AND CONTROLS**

- eldoLED flicker free 0-10V dimming to 0% and 1%
- eldoLED flicker free DALI dimming to 0% and 1%
- DMX dim to zero
- Lutron Hi-lumen 2-Wire (Triac and Eco System) dimming
- Leading & trailing edge (Triac/ELV) dimming to 1%
- Casambi bluetooth dimming to 0.1%
- NLight control interface dimming to 0%

#### CONSTRUCTION

- Lexan™ (PC) highly resistant to impact and heat (240°F)
- Optimal material for wireless BLE signal connectivity
- Shatter proof acrylic bezel lens
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 1/8" to 1-5/8"

#### LED

- 90 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L<sub>70</sub>
- 80 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L<sub>70</sub> > 66,000 hrs

#### LISTING

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens Suitable for wet locations with lens Suitable for damp locations without lens
- Non-conductive, dead-front construction (shower approved)
- Made in the USA meets the requirements of the Buy American provision within the ARRA
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- 5 Year Limited warranty

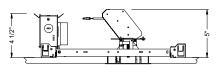
#### **ELECTRICAL**

- 120V-277V, 120 only Triac / ELV
- Power factory ≥ 0.9
- 2kV driver input surge protection
- Remote and Integral (ITS) emergency test switch
- 7W, 10W (T20 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)

#### **FIXTURE HEIGHT**

10LM-30LM LOW LUMENS 

#### **40LM HIGH LUMENS**



#### TRIMMED







**TRIMLESS** 



#### **MILLWORK**





Alphabet by Ledra Brands, Inc. 88 Maxwell Irvine, CA 92618 PH: 714.259.9959 FAX: 714.259.9969 AlphabetLighting.com

Page 1 of 9

	30	°- 70° BEAM ORDERING CODE							
SERIES	NU4	NU4							
	RD	round downlight							
TYPE	RDT	round downlight trimless							
	RDTMW	round downlight trimless millwork							
LED	SW	standard white							
	10LM	800 lm							
	15LM	1200 lm							
	20LM	1600 lm							
	25LM	2000 lm							
DELIVERED	30LM	2400 lm							
LUMENS	35LM	2800 lm							
	40LM	3000 lm							
		onfiguration: 3000K 80CRI WH70 Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector							
	Multiplier]	renvered currents - [Delivered current value] x [GGT waittpriet] x [nemector							
	27K	2700K   CCT   2700K   3000K   3500K   4000K							
сст	30K	3000K CRI 80+ 90+ 80+ 90+ 80+ 90+ 80+ 90+							
001	35K	3500K   CCT MULTIPLIER   0.96   0.81   1.00   0.85   1.03   0.88   1.06   0.91							
	40K	4000K   OUTPUT							
CRI	80	80 CRI							
Cni	90	90 CRI							
	HE40	40° high efficiency diffused lens (0.96)							
	HE60	60° high efficiency diffused lens (0							
	HE70	70° high efficiency diffused lens (0.92)							
	HET30	30° high efficiency textured lens, similar to Solite™ (0.97)							
	HET40	40° high efficiency textured lens, similar to Solite™ (0.87)							
	HET60	60° high efficiency textured lens, similar to Solite™ (0.92)							
OPTIC &	HET70	70° high efficiency textured lens, similar to Solite™ (0.97)							
LM MULTIPLIER	SS30	30° semi-specular with clear lens (0.90)							
SEE PAGE 4	SS40	40° semi-specular with clear lens (0.82)							
	SS60	60° semi-specular with clear lens (0.94)							
	D40	40° diffused with clear lens (0.86							
	D50	50° diffused with clear lens (0.90							
	D60	60° diffused with clear lens (0.90)							
	WH70	70° brilliant white with clear lens (1.00)							
		eam angle, see page 3 for details.							
ACCESSORY SEE PAGE 4	HCL <sup>1</sup>	honeycomb louver							
BEZEL LENS	Attached to b								
SEE PAGE 4	NL	no lens (1.00)							
	BK	black							
	WH	white							
TRIM Color	MC	matte chrome							
SEE PAGE 4	BZ	bronze							
	WT	wheat							
	Not applicabl	e to trimless option. Do not include in trimless ordering code.							
	BK	black (0.98)							
BEZEL	WH	white (1.00)							
COLOR	MC	matte chrome (0.99)							
SEE PAGE 4	BZ	bronze (0.98)							
	WT	whoat (0.00)							

PROJECT INFORMATION						
JOB NAME		TYPE				
ORDERING CODE						

		2-70° BEAM ORDERING CODE		
	NC	new construction with ceiling fitting plate		
MOUNTING	IC <sup>4</sup>	insulation contact housing		
OPTIONS	ICAT⁴	insulation contact/airtight housing		
SEE PAGE 7, 8	CP <sup>4</sup>	chicago plenum housing		
	RET	retrofit, no ceiling fitting plate		
VOLTAGE	120	120V		
VOLINGE	UNV	120V-277V		
	DIM10	eldoLED flicker free 0-10V dimming to 1%		
	DIM10Z	eldoLED flicker free 0-10V dimming to 0%		
	DALI	eldoLED flicker free DALI dimming to 1%		
	DALIZ	eldoLED flicker free DALI dimming to 0%		
	DMXZ	DMX dim to zero		
	LTE <sup>5</sup>	Lutron Hi-lume 2-Wire (Triac) dimming to 1%		
DIMMING	LUT	Lutron Hi-lume Ecosystem dimming to 1%, Soft-on & Fade-to-Black		
	LUTP <sup>6</sup>	Lutron Hi-lume Premier Ecosystem dimming to 0.1%, Soft-on & Fade-to-Black		
	ELV1 <sup>5</sup>	leading & trailing edge (Triac/ELV) dimming to 1%		
	NLT	nLight control interface: standard Cat-5/RJ45 connection (female), dimming to 0%		
	CAS	Casambi Bluetooth control with flicker free 0.1% dimming		
	EM7 <sup>7</sup>	emergency battery backup, 90 minutes at 7W to LED		
ELECTRICAL	EM12 <sup>7, 8</sup>	emergency battery backup, 90 minutes at 12W to LED		
OPTIONS	EM10CA20 <sup>7</sup>	remote emergency battery backup, 90 minutes at 10W to LED, CA title 20		

ADDITIONAL MOUNTING INFO						
New Construction	Mounting Length:					
Bar Hangers (included)	14-3/4" to 26"					
Extension Kit p/n: K20266	Extends a pair of Bar Hangers					
(ordered separately,	Total Mounting Length:					
1 per fixture)	29" to 48"					

#### YOUR COMPLETED ORDERING CODE

Follow the steps to specify your fixture, example:

NU4 - RD - SW - 20LM - 35K - 90 - D40 - NL - WH - WH - NC - UNV - DIM10 - EM7

#### NOTES

- 1. HCL not available with lens. Multiplier: Delivered Lumens (0.78) / Beam Spread (0.80).
- 2. NL option does not meet requirement for AT/DF/WET/NSF listings.
- 3. NL option available for SS30/SS40/SS60/D40/D50/D60/WH70.
- 4. IC/ICAT/CP not available in 35LM/40LM.
- 5. ELV1/LTE (120V) not available 10LM.
- 6. LUTP not available in 25LM/30LM/40LM.
- 7. For integrated test switch add "ITS" after emergency backup code, i.e. EM12ITS. Test switch is mounted in the bezel of the fixture.
- 8. EM12 not available in 10LM.

\*EldoLED uses logarithmic dimming curve as standard. For linear dimming curve, add "LIN" after dimming code, i.e. DIM10LIN.

Page 2 of 9

(0.99)

wheat

		IO° BEAM	ORDERING	COD	E						
SERIES	NU4	NU4									
	RD	round d	ownlight								
TYPE	RDT	round d	ownlight tri	mles	S						
	RDTMW	round downlight trimless millwork									
LED	SW	standard white									
	10LM	740 lm									
	15LM	1145 lm	1145 lm								
	20LM	1525 lm									
DELIVERED	25LM	1900 lm									
LUMENS	30LM	2285 lm									
	Standard Co	nfiguration	• 3000K 80CBI •	S10							
	Standard Configuration: 3000K 80CRI S10  Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector										
	Multiplier]									, [	
	27K	2700K	CCT		00K	300	00K	350	00K	400	00K
сст	30K	3000K	CRI	80+	90+	80+	90+	80+	90+	80+	90+
001	35K	3500K	FOR LUMEN OUTPUT	0.96	0.81	1.00	0.85	1.03	0.88	1.06	0.91
	40K	4000K	UUIPUI								
CRI	80	80 CRI									
	90	90 CRI									
OPTIC & Lm multiplier	S10	10° spec	ular with cl	ear l	ens					(1	.00)
SEE PAGE 4											
ACCESSORY	HCL <sup>1</sup>	honeyco	mb louver								
SEE PAGE 4	Attached to b	ezel									
BEZEL LENS SEE PAGE 4	$NL^2$	no lens								(1	.00)
	BK	black									
	WH	white									
TRIM COLOR	MC	matte cl	nrome								
SEE PAGE 4	BZ	bronze									
	WT	wheat									
	Not applicabl	e to trimless	option. Do not	inclu	de in t	rimles	s orde	ring co	ode.		
	BK	black								(0	.98)
BEZEL	WH	white								(1	.00)
COLOR	MC	matte cl	nrome							(0	.99)
SEE PAGE 4	BZ	bronze								(0	.98)

WT

wheat

PROJECT INFORMATION							
JOB NAME		TYPE					
ORDERING CODE							

		10° BEAM ORDERING CODE		
	NC	new construction with ceiling fitting plate		
MOUNTING	IC <sup>3</sup>	insulation contact housing		
OPTIONS	ICAT <sup>3</sup>	insulation contact/airtight housing		
SEE PAGE 7, 8	CP <sup>3</sup>	chicago plenum housing		
	RET	retrofit, no ceiling fitting plate		
VOLTAGE	120	120V		
VOLINGE	UNV	120V-277V		
	DIM10	eldoLED flicker free 0-10V dimming to 1%		
	DIM10Z	eldoLED flicker free 0-10V dimming to 0%		
	DALI	eldoLED flicker free DALI dimming to 1%		
	DALIZ	eldoLED flicker free DALI dimming to 0%		
	DMXZ	DMX dim to zero		
	LTE⁴	Lutron Hi-lume 2-Wire (Triac) dimming to 1%		
DIMMING	LUT	Lutron Hi-lume Ecosystem dimming to 1%, Soft-on & Fade-to-Black		
	LUTP⁵	Lutron Hi-lume Premier Ecosystem dimming to 0.1%, Soft-on & Fade-to-Black		
	ELV1 <sup>4</sup>	leading & trailing edge (Triac/ELV) dimming to 1%		
	NLT	nLight control interface: standard Cat-5/RJ45 connection (female), dimming to 0%		
	CAS	Casambi Bluetooth control with flicker free 1% dimming		
	EM7 <sup>6</sup>	emergency battery backup, 90 minutes at 7W to LED		
ELECTRICAL	EM12 <sup>6, 7</sup>	emergency battery backup, 90 minutes at 12W to LED		
OPTIONS	EM10CA20 <sup>7</sup>	emergency battery backup, 90 minutes at 10W to LED, CA title 20		

ADDITIONAL MOUNTING INFO		
New Construction	Mounting Length:	
Bar Hangers (included)	14-3/4" to 26"	
Extension Kit p/n: K20266	Extends a pair of Bar Hangers	
(ordered separately,	Total Mounting Length:	
1 per fixture)	29" to 48"	

YOUR COMPLETED ORDERING CODE		
Follow the steps to specify your fixture, example:		
NU4 - RD - SW - 20LM - 35K - 90 - S10 - NL - WH - WH - NC - UNV - DIM10 - EM7		

#### NOTES

(0.99)

- 1. HCL not available with lens. Multiplier: Delivered Lumens (0.78) / Beam Spread (0.80).
- 2. NL option does not meet requirement for AT/DF/WET/NSF listings.
- 3. IC/ICAT/CP not available in 25LM/30LM.
- 4. ELV1/LTE (120V) not available 10LM.
- 5. LUTP not available in 25LM/30LM.
- 6. For integrated test switch add "ITS" after emergency backup code, i.e. EM12ITS. Test switch is mounted in the bezel of the fixture.
- 7. EM12 not available in 10LM.

\*EldoLED uses logarithmic dimming curve as standard. For linear dimming curve, add "LIN" after dimming code, i.e. DIM10LIN.



PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

#### **TRIM OPTIONS**

#### TRIM/BEZEL COLORS





MC





BZ



**OPTICAL OPTIONS** 

- UGR calculation based on CIE 117-1995; room size: 4H X 8H, reflectance: 70/50/20;
- UGR calculation based on 15LM fixtures, unless otherwise noted.

### **ACCESSORY**



OPTIC	BEAM ANGLE	UGR
S10	10	5
SS30	24.5	5
SS40	35.7	5
SS60	47.2	5
D40	33.4	5
D50	38.2	5
D60	49	5

HE High Efficiency Diffused Lens

OPTIC	BEAM ANGLE	UGR
HE40	45.7	21.2
HE60	59.5	21.8
HE70	75.8	23.1

CL Clear Lens



OPTIC	BEAM ANGLE	UGR
S10	12.6	14.7
SS30	30.6	14.9
SS40	44.6	16.6
SS60	59	16.8
D40	41.8	16.2
D50	47.8	17
D60	61.2	17.7

HET High Efficiency Textured Lens



OPTIC	BEAM ANGLE	UGR
HET30	30	14.3
HET40	36.2	15.4
HET60	55.5	19.2
HET70	69.3	24.2

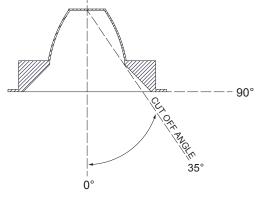
#### **GLARE CONTROL**

#### **CUT-OFF ANGLE**

Visual comfort is achieved with a lower cut-off angle due to improved glare control. The smaller the cut-off angle, the easier it is on the eye.

Alphabet downlights have been thoughtfully engineered to eliminate glare while still delivering functional illumination.

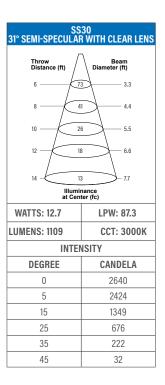
- Cutoff angle of CL is 35 degrees;

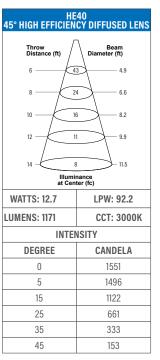


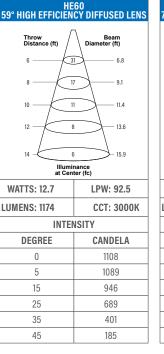
PROJECT INFOR	MATION		
JOB NAME		TYPE	
ORDERING CODE			

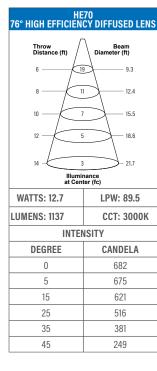
#### **PHOTOMETRIC DATA**

15LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance <sup>2</sup>		

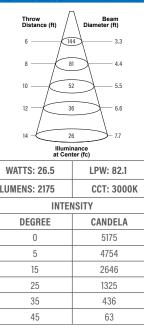


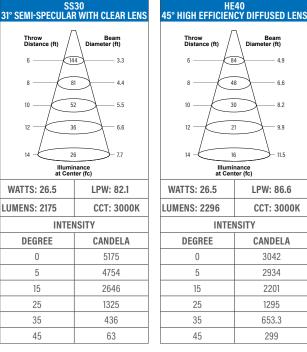


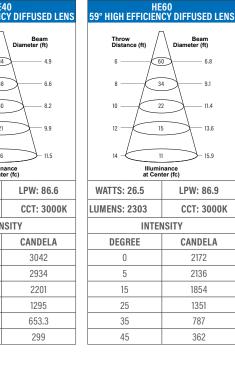


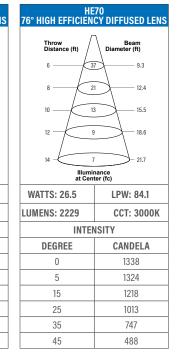


201.84	COT MULTID	LIEDO
JULIV	CCT MULTIP	LIEKS
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance <sup>2</sup>		







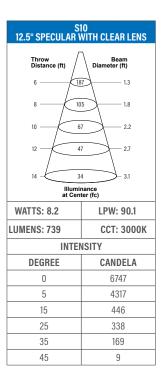




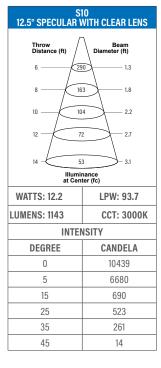
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

# | 10LM CCT MULTIPLIERS | 80CRI | 90CRI | 2700K | 0.96 | 0.81 | 3000K | 1 | 0.85 | 3500K | 1.03 | 0.88 | 4000K | 1.06 | 0.91 | FC Formula = CBCP / Distance<sup>2</sup>

**PHOTOMETRIC DATA** 



15LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance <sup>2</sup>		

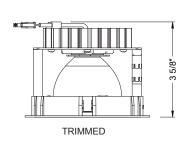


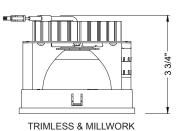
PROJECT INFORMATION						
JOB NAME		TYPE				
ORDERING CODE						

#### **MOUNTING OPTIONS**

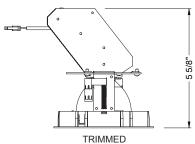
#### **FIXTURE HEIGHT**

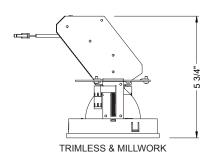
10LM-30LM CONFIGURATION





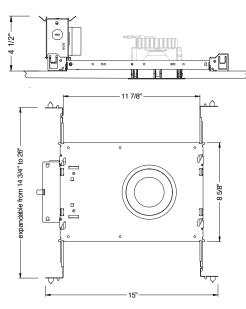
#### **40LM CONFIGURATION**





#### NC - NEW CONSTRUCTION

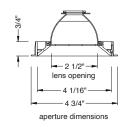
**TRIM** 



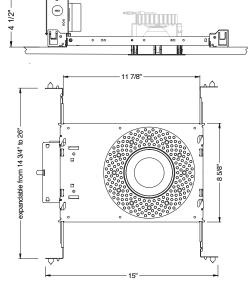




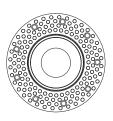
ceiling cutout 4-3/8" diameter 1/8" to 1-5/8"



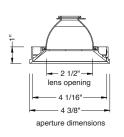
#### **TRIMLESS**



#### **TRIMLESS**



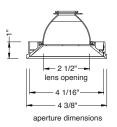
ceiling cutout 4-1/2" diameter ceiling thickness 3/8" to 1-3/4"



#### TRIMLESS/MILLWORK



ceiling cutout 4-3/8" diameter ceiling thickness



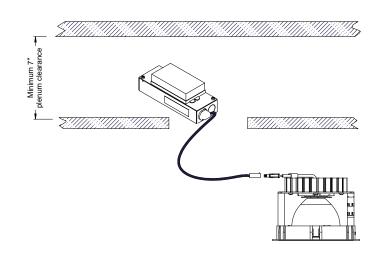
Alphabet by Ledra Brands, Inc. | 88 Maxwell Irvine, CA 92618 | PH: 714.259.9959 FAX: 714.259.9969 | AlphabetLighting.com



PROJECT INFORMATION					
JOB NAME		TYPE			
ORDERING CODE					

#### **MOUNTING OPTIONS (CONTINUED)**

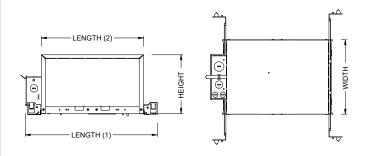
#### RET - RETRO TRIM/TRIMLESS



RATINGS / CERTIFICATIONS	NC	RET	IC	CP
TYPE NON-IC	~	~		
TYPE IC			~	~
CHICAGO PLENUM (CCEA)				~
SUITABLE FOR AIR HANDLING PLENUMS	~	~	~	~
REDUCED AIRFLOW (WITH LENS) ASTM E283	~	~	~	~

CEILING THICKNESS						
	MOUNTING TYPE					
FIXTURE TYPE	NC, IC, ICAT, CP, RET					
	STANDARD CEILING THICKNESS					
TRIM	1/8" to 1-5/8"					
TRIMLESS	3/8" to 1-3/4"					
MILLWORK (TRIMLESS)	1/2" to 1-3/4"					

# IC - INSULATION CONTACT HOUSING ICAT - INSULATION CONTACT / AIR TIGHT CP - CHICAGO PLENUM



BOX SIZE	L1	L 2	W	Н
Α	15 - 7/16"	11 - 3/4"	8 - 1/2"	6 - 3/4"
В	18 - 1/4"	14 - 7/8"	12 - 1/8"	11 - 1/4"

BOX TYPE / LUMEN OUTPUT - NARROW BEAM (10°)								
LUMEN OUTDUT	BO	X - A	BOX - B					
LUMEN OUTPUT	IC	СР	IC	ICAT	СР			
10LM	~	~						
15LM	~	~						
20LM			~	~	V			
25LM								
30LM								

BOX TYPE / LUMEN OUTPUT - STANDARD BEAMS (30° - 70°)								
LUMEN OUTDUT	BOX - A		BOX - B					
LUMEN OUTPUT	IC	CP	IC	ICAT	СР			
10LM	~	~						
15LM	V	~						
20LM	~	~						
25LM	V	V						
30LM			V	V	~			
35LM								
40LM								



PROJECT INFOR	MATION		
JOB NAME		TYPE	
ORDERING CODE			

#### **BATTERY OPTIONS**

#### **EMERGENCY BATTERY**

IOTA's ILB Battery Backups are UL Listed LED emergency drivers that allow the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the ILB switches to the emergency mode and operates the existing fixture for 90 minutes. The unit contains a battery, charger, and converter circuit in a single can. The Constant Power design of the ILB maintains the output wattage to the LED array even as the system voltage diminishes. UL 924 Listed for U.S. and Canada. UL 1310 Certified, Output Class 2 Compliant. Includes single-piece TBTS test switch and charge indicator accessory kit. For use with switched and unswitched fixtures, and includes Two-wire universal AC input. Meets or exceeds all National Electric Code and Life Safety Code Emergency Lighting Requirements. Rated for use in Plenum, Damp Location, Recessed Type IC, and Enclosed and Gasketed Luminares.

#### REMOTE TEST SWITCH

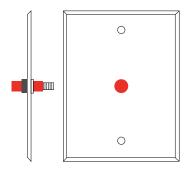
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

#### **EMERGENCY BATTERY ACCESS**

Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency Battery is required.

#### REMOTE LOCATION

Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all Local and National Electric/

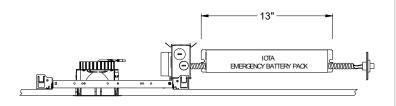


Remote Test Switch

EM MODE OUTPUT (DELIVERED LUMENS)							
LUMEN ORDERING CODE EM7 EM10 EM12							
ALL OPTIONS (10LM TO 30LM)	560LM	1000LM	1200LM				
Notes: Based on 30K, 80CRI							

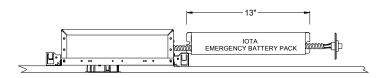
#### **NC - NEW CONSTRUCTION**

WITH EM BATTERY (REMOTE TEST SWITCH)



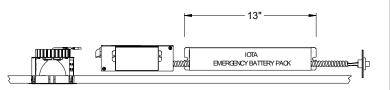
#### IC / ICAT / CP - INSULATION CONTACT HOUSING

WITH EM BATTERY (REMOTE TEST SWITCH)



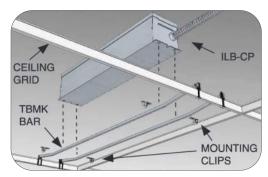
#### **RET - RETROFIT**

WITH EM BATTERY (REMOTE TEST SWITCH)



#### Accessory

76066 Optional T-Grid Mounting Kit2



2. Can be used with any of the Emergency Battery Backups. Must be ordered as a separate line item.

### SCOPE MEDIUM SC

CYLINDER UP OR DOWN, UP AND DOWN | WHITE LIGHT

PROJECT: TYPE: CATALOG #: SSM -- WM -

#### **PROFILE**

WATTAGE LO (10.0W), MO (20.0W) **OPTICS** 20°, 30°, 55°, ASYMMETRIC

CCT 2700K, 3000K, 3500K, 4000K (82 CRI)

CRI 82+ CRI

PERFORMANCE UP TO 12457 PEAK CANDELA (20.0W)

**VOLTAGE** 120V OR 277V

POWER INTEGRATED POWER SUPPLY

DIMMING 0-10V (DIMS DOWN TO 1%), DMX DIMMING

DIMENSIONS 10.00" X 3.00", 16.00" X 3.00" HOUSING EXTRUDED ALUMINUM HOUSING

LENS TEMPERED GLASS

**FINISH** HIGH DURABILITY POWDER COATING

WARRANTY 5-YEAR LIMITED -30° C TO 50° C **OPERATING TEMP** LUMEN MAINTENANCE 84,000 HOURS

CERTIFICATION ETL/cETL WET LOCATION, IP66, 3G

MEETS ADA REQUIREMENTS











#### STANDARD FINISHES











L. BRONZE





TEXTURED

**OPTICS** 

NOT ALL AVAILABLE OPTICS SHOWN



DOWNLIGHT



DOWNLIGHT

30°

UPLIGHT





















20°/20° UPLIGHT/ DOWNLIGHT

20°

UPLIGHT

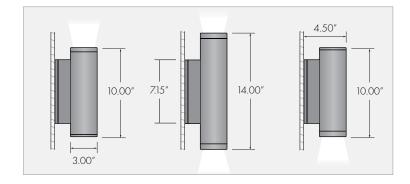


UPLIGHT/ DOWNLIGHT

55°/55° UPLIGHT/ DOWNLIGHT

ASY/ ASY UPLIGHT/ **DOWNLIGHT** 

**PROFILE** 



## insight lighting

### SCOPE MEDIUM SCONCE

CYLINDER UP OR DOWN, UP AND DOWN | WHITE LIGHT

SPECIFICATION
---------------

	1	1 1	1	ı		1	ı	ı
SSM				W	M			
1 2 3	4	5	6 7	8	3 9	10	[1]	]
1 FIXTURE		6 CCT - DOWNL	IGHT	8	MOUNTING		11 FINISH	
SCOPE MEDIUM SCONCE	SSM	2700K	27	7K	WALL MOUNT	WM	TEXTURED WHITE	TW
		3000K	30	<u> </u>	_		TEXTURED BLACK	TBL
2 LIGHT DIRECTION		3500K	3.	5K 9	VOLTAGE		TEXTURED BRONZE	TBR
UPLIGHT	UP	4000K	40	<u>OK</u>	120V	120	TEXTURED LIGHT BRONZI	E TLB
DOWNLIGHT	DN	NO SELECTION	1 1	<u>NA</u>	277V	277	TEXTURED GRAY	TG
UPLIGHT AND DOWNLIGHT	UD			_			TEXTURED SANDSTONE	TS
		7 OPTICS - DOW	/NLIGHT	10			CUSTOM COLOR	CC
3 WATTAGE		<u>20°</u>		20	<u>NON-DIMMING</u>	NO	Contact factory for custom color - ac charges will apply	dditional
LOW OUPUT  10 W IN EITHER DIRECTION	LO	30°		30	0-10V DIMMING Dims down to 1%	DIM	charges will apply	
MEDIUM OUTPUT	МО	55°		<u>55</u>	DMX DIMMING	DMX	12 OPTIONS	
20 W IN EITHER DIRECTION	1010	<b>ASYMMETRIC</b>	A	<u>ISY</u>	Requires DMX Distribution and		HIGH CRI, 90+	HCRI
		NO SELECTION	1 1	VA_	see below		INTEGRAL HEX LOUVER	IHL
4 CCT - UPLIGHT					Dimming controls to be provid	ed by others	47% Light loss	11.16
2700K	27K						CORROSION RESISTANT	CRF
3000K	30K						Corrosion Resistance Finish Complies B 117 standard	s with ASTM
3500K	35K						CRF is recommended for coastal or	extreme exterior
4000K	40K						environments	
NO SELECTION	NA							
5 OPTICS - UPLIGHT								
20°	20							
30°	30							
55°	55							
ASYMMETRIC	ASY							
NO SELECTION	NA							

#### CONTROL & WIRING OPTIONS

Go To DMX Guide >

DMX DISTRIBUTION AND PROGRAMMING KIT - REQUIRED FOR DMX DIMMING

DMX/RDM DISTRIBUTION KIT (4 OUTPUTS) - IP67 CDS-RDM

DMX/RDM Distribution Kit consists of four outputs

Each output is limited to one run per output - up to 32 fixtures max. If light direction is Uplight and Downlight, up to

16 fixtures max.
Four terminators are included for end of line termination

RDM TOOL - OPTIONAL

DMX/RDM PROGRAMMING TOOL DMX/RDM measurement and testing tool

RDM

Allows for RDM addressing and monitoring of products that have RDM capability while also being able to test all

elements of DMX data signals to ensure proper system operations

Contact factory to order

# insight lighting

### scope medium sconce

CYLINDER UP OR DOWN, UP AND DOWN | WHITE LIGHT

PROJECT: TYPE: CATALOG #: SSM - - - - - - - - - - - - - - - -

#### PERFORMANCE

#### PERFORMANCE DATA

		SINGLE DIRECTION LOW OUTPUT (10 W)			SINGLE DIR	ECTION MEDIUM OUT	PUT (20 W)
OPTIC	CCT	DELIVERED LUMENS	LUMINARE EFFICACY	PEAK CANDELA	DELIVERED LUMENS	LUMINARE EFFICACY	PEAK CANDELA
20°	4000K	1106 LM	99.6 LM/W	6755	2001 LM	104.3 LM/W	12457
30°	4000K	1094 LM	98.5 LM/W	3132	1936 LM	101.0 LM/W	7961
55°	4000K	1034 LM	93.2 LM/W	1290	1871 LM	97.7 LM/W	2379

#### WIRING

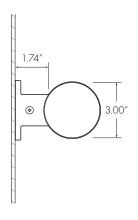
#### FIXTURES PER 10 AMP CIRCUIT (FULL LOAD)

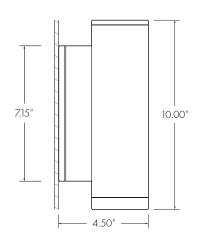
FIXTURE	SINGLE DIR	ECTION LO	SINGLE DIRE	ECTION MO	UPLIGHT & DC	WNLIGHT LO	UPLIGHT & DC	WNLIGHT MO
VOLTAGE	120V	277V	120V	277V	120V	277V	120V	277V
	120	277	60	138	60	138	30	69

CYLINDER UP OR DOWN, UP AND DOWN | WHITE LIGHT

#### FIXTURE DIMENSIONS

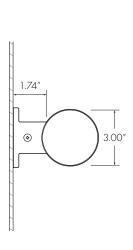
#### WM - WALL MOUNT (SINGLE DIRECTION)

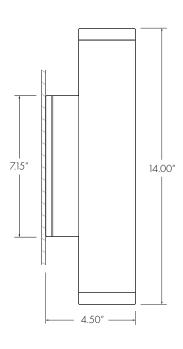


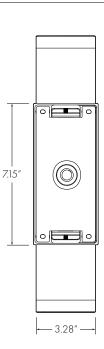




#### WM - WALL MOUNT (UP AND DOWN)

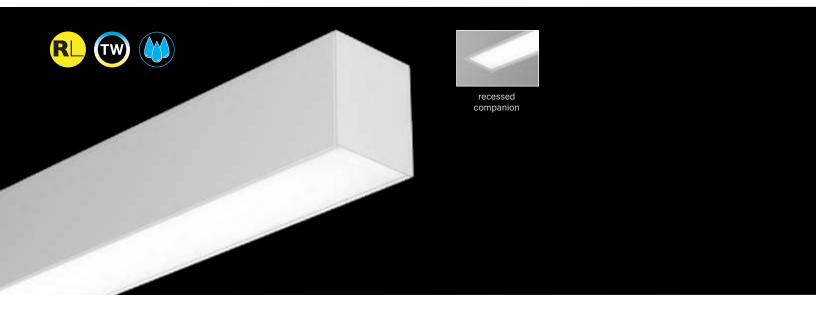




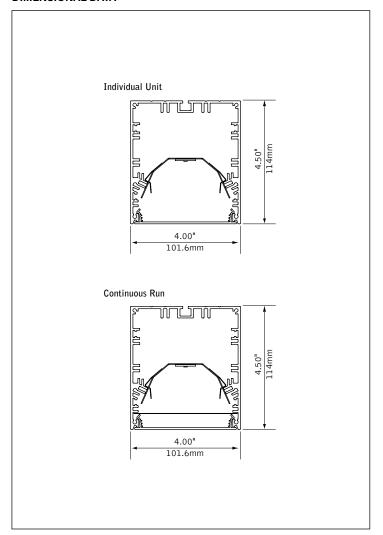


# Seem® 4 LED - SURFACE MOUNT | WET LOCATION





#### **DIMENSIONAL DATA**



#### **FEATURES**

Narrow extruded aluminum 4" linear direct LED.

Individual units and continuous runs in 1' increments.

Available in flush, asymmetric, asymmetric room fill or batwing, lens.

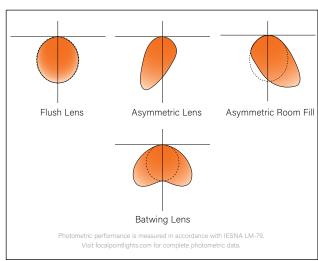
Frosted acrylic lens provides uninterrupted illumination, without pixels or shadows.

LED position and lens material optimized to provide the perfect blend of high performance and visual comfort.

Choice of output levels to meet a wide variety of application needs.

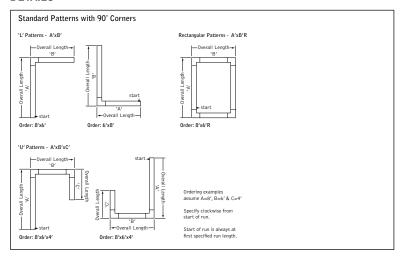
Tunable White: Supports human activity, well-being, and preferences with a light quality that evolves throughout the day.

#### **PERFORMANCE**



fixture: project:

#### **DETAILS**



#### 4' PERFORMANCE CHART

				LP	w	
Lumen Output	Nominal Lumens	Tested System Watts	BW	FL	AS	AF
275LF	1100	9.5	110	106	114	114
375LF	1500	12.5	119	114	123	123
625LF	2500	21.4	119	113	122	122
875LF	3500	30.4	118	113	122	122
1000LF	4000	35.0	117	112	121	121
1125LF	4500	39.6	116	111	119	119
1250LF	5000	43.5	115	110	119	118

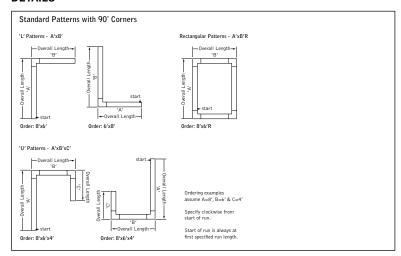
Based on 3500K, 80 CRI, 4' lengths. Lumen multiplier: 90+ CRI = 0.87. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

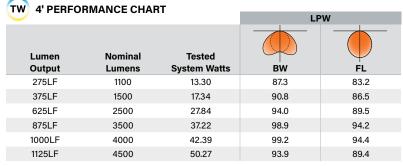
#### STANDARD WHITE

STANDARD WHITE		
<b>Luminaire Series</b> Seem 4 LED Wet Location	FSM4LWLS	FSM4LWLS
Shielding		
Asymmetric Lens*	AS	
Asymmetric Room Fill*	AF	
Batwing Lens*	BW FL	
Flush Satin Lens (*individual units only)	FL	
Lumen Output		
275 Lumens per foot (LD1 & L11 only.)	275LF	
375 Lumens per foot (LD1 & L11 only.)	375LF	
625 Lumens per foot (3' minimum with LH1.)	625LF	
875 Lumens per foot	875LF	
1000 Lumens per foot	1000LF	
1125 Lumens per foot	1125LF	
1250 Lumens per foot	1250LF	
Color Temperature		
3000K, 80+ CRI	30K	
3500K, 80+ CRI	35K	
4000K, 80+ CRI	40K	
Circuits & Zones	10	
1 Circuit, non-emergency Consult Ordering Guide on page 3 for	1C	
multiple circuiting and zoning options	_C_Z_DL	
Voltage		UNV
120/277 UNV Volt	UNV	
Control System & Dimming Level		
0-10V - 10% Dimming	LD1	
0-10V - 1% Dimming	L11 LH1	
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LIII	
(3' minimum length)		
Mounting		SM
Surface Mount	SM	
Factory Options		
(See page 4 for ordering details for DC, EC, EM & ECD.)		
Daylight Circuit	_DC	
Emergency Circuit	_EC	
Emergency Battery Pack <sup>†</sup>	_EM	
Emergency Control Device† †(4' minimum. 120/277 Volt only.	_ECD	
EM or ECD not available at corners.)		
Outdoor Rated (LD1 only. Not available with EM.)	OD	
Finish		WH
Matte White Housing	WH	
Luminaire Length		
Specify luminaire/row length	X'	
in 1' increments (2' minimum length.)		
Pattern Options		
(3' minimum length)		
'L' pattern	A' x B'	
'U' pattern	A' x B' x C'	
Rectangular pattern	A' x B'R	

fixture: project:

#### **DETAILS**





Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

#### **Lumen Multipliers**

CRI	Multiplier
80+	1.00
90+	0.89

#### Wattage Multipliers

CCT	Multiplier
2700K	1.00
3000K	0.92
3500K	0.88
4000K	0.86
5000K	0.85
5700K	0.87
6500K	0.90



#### **TUNABLE WHITE**

TW	TUNABLE WHITE		
	Luminaire Series		FSM4LWLS
	Seem 4 LED Wet Location	FSM4LWLS	
	Shielding		
	Batwing Lens (individual units only)	BW	
	Flush Satin Lens	FL	
		ΓL	
	Lumen Output 275 Lumens per foot	275LF	
	275 Lumens per foot (3' min. with D1TW. 4' min. with LT1.)		
	375 Lumens per foot (3' min. with LT1)	375LF	
	625 Lumens per foot	625LF	
	875 Lumens per foot	875LF	
	1000 Lumens per foot	1000LF	
	1125 Lumens per foot	1125LF	
Tunable V	Color Temperature White: 2700-6500K, 80+ CRI	2765T	
	Vhite: 2700-6500K, 90+ CRI	92765T	
14.145.0	Circuits & Zones		
	1 Circuit, non-emergency	1C	
Consult C	Ordering Guide on page 3 for		
	ircuiting and zoning options	_C_Z_DL	
	Voltage		UNV
	120/277 UNV Volt	UNV	
Contro	l System & Dimming Level		
Lu	ıtron T-Series - 1% Dimming	LT1	
(DT6 control Require	DALI - 1% Dimming es two addresses, one for intensity & one	D1TW	
(D 10 control negan	for CCT tuning. Consult factory for DT8.)		
	Mounting		SM
	Surface Mount	SM	
	Factory Options		
(See page 4 for	ordering details for DC, EC, EM & ECD.)	DC	
	Daylight Circuit	_DC	
	Emergency Circuit	_EC	
	Emergency Battery Pack	_EM	
	Emergency Control Device†  †(Consult factory)	_ECD	
	,		WH
	Finish Matte White Housing	WH	
	Luminaire Length		
S	Specify luminaire/row length	X'	
	in 1' increments		
	(2' minimum length.)		
	Pattern Options		
	(3' minimum length)	ALV DI	
	'L' pattern	A' x B' A' x B' x C'	
	'U' pattern	A' X B' X C'	

Rectangular pattern A' x B'R

#### **SPECIFICATIONS**

#### LED System

Proprietary linear LED module incorporates premium LEDs on a robust platform to achieve excellent thermal management. LEDs are placed to promote a uniform appearance. Available in 2700K, 3000K, 3500K or 4000K with CRI>80 or CRI>90, 3 SDCM or Tunable White (2700K-6500K), CRI>80, >90. LED modules and drivers are replaceable from below.

#### Construction

One piece extruded aluminum housing. Die cast aluminum end caps. 2' unit weight: 10 lbs., 3' unit weight: 14 lbs., 4' unit weight: 18 lbs., 5' unit weight: 22 lbs.

#### Optio

Reflectors fabricated of 22 Ga. steel finished in High Reflectance White powder coat. Extruded acrylic lens .085" thick with satin finish, up to 8' continuous.

#### **Flectrica**

Luminaires are pre-wired with factory installed branch circuit wiring and over-molded quick connects. Standard 120-277V constant current driver includes 0-10V analog dimming.

Dimming range 100% to 10%. Power factor > .9.

#### Emergency

Output - 10 watts for 90 minutes. Maximum mounting height: 19.2ft.

#### Labels

UL and cUL Listed. Suitable for Dry, Damp or Wet Locations, indoor use only. Specify Outdoor rated (OD) for outdoor covered ceiling applications. Outdoor rating not available with Tunable White.

#### Finis

Polyester powder coat applied over a multi-stage pre-treatment. Canopy and cord white as standard.

#### Lumen Maintenance

(Derived from EPA TM-21 calculator. Based on typical conditions, consult factory for additional data.)

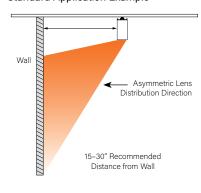
#### Reliability

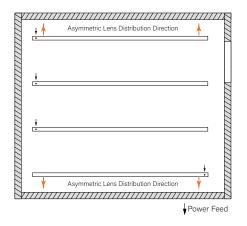
At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

#### Warranty

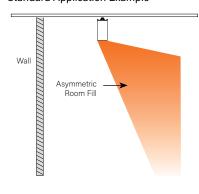
LED System rated for operation in ambient environments up to 25°C. 5-year limited warranty. Fixture with Outdoor rated (OD) option must be installed in a covered ceiling and is warrantied for operation in ambient environments between  $-20^{\circ}$ C to  $+40^{\circ}$ C.

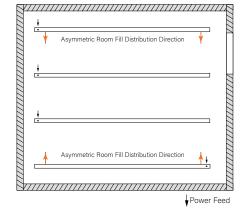
### **DIRECT ASYMMETRIC**Standard Application Example





### **DIRECT ASYMMETRIC ROOM FILL** Standard Application Example





# Ordering Guide

#### **Linear Circuitry, Zones & Factory Options**



#### **HOW TO USE THIS GUIDE**

Fill out the worksheet on the following page to specify your requirements for circuitry, zones, and factory options.

Refer to the run chart for standard run configurations, consult factory for custom configurations.

Complete the Totals / Ordering Codes at the bottom of the worksheet and add to your ordering logic on the cut sheet.

Submit the worksheet along with your order.

	TOTAL RUN	LENGTH:	32ft	JOB NAME:			FIXTURE TYPE: _		
	SHARED I		RED ELECTRICAL F	ED ELECTRICAL FEED,		FACTORY OPTIONS			
	HOUSING	SECTION		NORMAL POWER			SEPARATE ELECTRICAL FEEDS		
m	SECTION	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM
EXAMPLE	1	8	1C	1Z					1EM
Ę	2	8	2C	2Z					
	3	8	2C	2Z					
	4	8				1DC			
	Totals / Ord	ering Codes	2C	<b>2Z</b>		1DC			1EM

ORDERING: FSM4L-FL-625LF-35K- 2C2Z -UNV-LD1-G2-1DC-1EM -WH-32ft

Section 1 EM BATTERY	Section 2	Section 3	Section 4
1C	2	c —	1DC
1Z	2	Z	

KEY	
C = Switching Circuit Switched Hot / Shared Neutral	DC = Daylight Circuit Switched Hot / Separate Neutral
<b>Z = Dimming Zone</b> Dimming Control Wires	EC = Emergency Circuit Switched Hot / Separate Neutral
<b>DL = Daylight Zone</b> Daylight Dimming Control Wires	EM = Emergency Battery Unswitched Hot / Shared Neutral
	ECD = Emergency Control Device Unswitched Hot / Separate Neutral

#### **DEFAULTS**

- Zones and Factory Options illuminate entire sections from 4' to 8' in length.
- One shared or isolated circuit and zone required per housing section.
- · Limit of one EM or ECD per housing section.
- Additional electrical feed required for applications greater than three shared circuits and zones.
- Each DC, EC and ECD require an additional electrical feed.
- ECD not available in the same housing section as EC.
- Longer lead times and additional pricing may apply for custom run configurations.

#### **CUSTOM LENGTHS**

- If partial illumination of emergency or daylight section is required, indicate in ordering guide and add "partial illumination" in Order Notes. Drawing required.
- Engineering validation required, longer lead times may apply.

# Ordering Guide Worksheet



**Linear Circuitry, Zones & Factory Options** 

FOCAL POINT

	TOTAL RUN	LENGTH:		JOB NAME:			FIXTURE TYPE:		
			SHARED ELECTRICAL FEED,			FACTORY OPTIONS			
	HOUSING	SECTION		NORMAL POWER		SEPARATE ELECTRICAL FEEDS			
	SECTION	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM
	1								
	2								
	3								
	4								
	5								
	6								
	7								
WOI	8								
WORKSHEET	9								
EET	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								
	Totals / Ord	ering Codes							

Combine to create Circuits & Zones ordering code

Enter as individual Factory Options

#### **RUN CHART**

HON CHAIL					
Run length (ft)	Housing Configuration Section Lengths	Run length (ft)	Housing Configuration Section Lengths	Run length (ft)	Housing Configuration Section Lengths
9	5 + 4	21	8 + 8 + 5	33	8 + 8 + 8 + 5 + 4
10	6 + 4	22	8 + 8 + 6	34	8 + 8 + 8 + 6 + 4
11	7 + 4	23	8 + 8 + 7	35	8 + 8 + 8 + 7 + 4
12	8 + 4	24	8 + 8 + 8	36	8 + 8 + 8 + 8 + 4
13	8 + 5	25	8 + 8 + 5 + 4	37	8 + 8 + 8 + 8 + 5
14	8 + 6	26	8 + 8 + 6 + 4	38	8 + 8 + 8 + 8 + 6
15	8 + 7	27	8 + 8 + 7 + 4	39	8 + 8 + 8 + 8 + 7
16	8 + 8	28	8 + 8 + 8 + 4	40	8 + 8 + 8 + 8 + 8
17	8 + 5 + 4	29	8 + 8 + 8 + 5	41	8 + 8 + 8 + 8 + 5 + 4
18	8 + 6 + 4	30	8 + 8 + 8 + 6	42	8 + 8 + 8 + 8 + 6 + 4
19	8 + 7 + 4	31	8 + 8 + 8 + 7	43	8 + 8 + 8 + 8 + 7 + 4
20	8 + 8 + 4	32	8 + 8 + 8 + 8	44	8 + 8 + 8 + 8 + 8 + 4

Run length (ft)	Housing Configuration Section Lengths
45	8 + 8 + 8 + 8 + 8 + 5
46	8 + 8 + 8 + 8 + 8 + 6
47	8 + 8 + 8 + 8 + 8 + 7
48	8 + 8 + 8 + 8 + 8 + 8

Standard run configurations, consult factory for custom configurations.



### **Ratio Flood**

COMPACT

#### **FEATURES**

- Compact LED flood with a variety of NEMA distributions for lighting applications such as: safety/security, accent, flag pole, columns or signs
- Part of the Ratio flood series, this luminaire was designed in cohesion with the site/area products to provide a sleek and timeless look
- Features a dense optical array, providing reduced pixelation and increased visual comfort without compromising performance











### **RATIO**



CATALOG #:



#### **SPECIFICATIONS**

#### CONSTRUCTION

- Corrosion resistant, rugged die-cast aluminum housing with powder coat paint finish
- High impact UV stabilized acrylic outer lens protects LEDs and allows for cleaning and debris removal
- Internal venting fins create optimal heat dissipation and allow all water to drain from the face of the luminaire
- Lens hardware is internal to the fixture allowing for uniform pressure on the gasket for an optimal water tight seal

#### OPTICS

- 44 or 90 midpower LEDs
- Stock Versions: 4000K and 5000K CCT
- Variety of NEMA distributions: N (2x2), M (4x4) and W (6x6) - Stock version Wide (6x6) only
- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance

#### INSTALLATION

- Traditional ½" x 14 NPS threaded adjustable knuckle mounting
- Easy maintenance access to electrical components with removal of 4 screws from back of fixture housing
- Trunnion mount available (sold separately)

#### **ELECTRICAL**

- 120-277V operation, 50/60Hz
- · Driver IP66 and RoHS compliant driver
- 10kV surge protector optional
- 0–10V dimming driver standard, continuous dimming option to have leads pulled out for easy connection
- Drivers have 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls

#### CERTIFICATIONS

- · Fixture is IP66 rated
- Listed to UL1598 for use in wet locations
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See Buy American Solutions

#### WARRANTY

- · 5 year limited warranty
- See <u>HLI Standard Warranty</u> for additional information

KEY DATA						
Lumen Range	3245–6823					
Wattage Range	26–52					
Efficacy Range (LPW)	126–142					
Weights lbs. (kg)	3.7-5.5 (6.12-10.8)					





### **Ratio Flood**

COMPACT

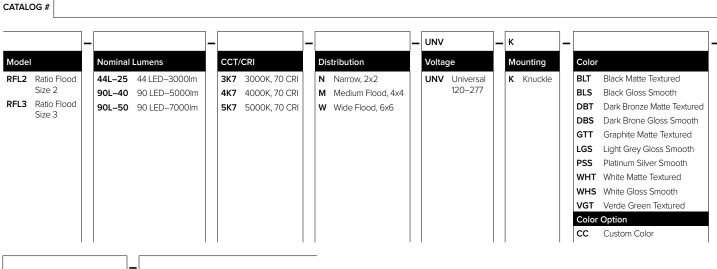
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

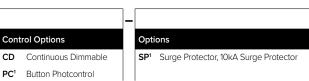
#### STOCK ORDERING INFORMATION

Catalog Number	Mounting	Distribution	Wattage	Voltage	ССТ	Lumens	LPW	Weight lbs. (KG)	Finish
RFL2-25-4K	Knuckle	Wide	26	120-277V	4000K	3327	127	3.7 (1.68)	Bronze
RFL2-25-5K	Knuckle	Wide	26	120-277V	5000K	3245	124	3.7 (1.68)	Bronze
RFL2-25-4K-PC	Knuckle	Wide	26	120-277V	4000K	3327	127	3.7 (1.68)	Bronze
RFL2-25-5K-PC	Knuckle	Wide	26	120-277V	5000K	3245	124	3.7 (1.68)	Bronze
RFL3-40-4K	Knuckle	Wide	34	120-277V	4000K	4551	134	5.5 (2.50)	Bronze
RFL3-40-5K	Knuckle	Wide	34	120-277V	5000K	4439	131	5.5 (2.50)	Bronze
RFL3-40-4K-PC	Knuckle	Wide	34	120-277V	4000K	4551	134	5.5 (2.50)	Bronze
RFL3-40-5K-PC	Knuckle	Wide	34	120-277V	5000K	4439	131	5.5 (2.50)	Bronze
RFL3-50-4K	Knuckle	Wide	52	120-277V	4000K	6823	131	5.5 (2.50)	Bronze
RFL3-50-5K	Knuckle	Wide	52	120-277V	5000K	6654	128	5.5 (2.50)	Bronze
RFL3-50-4K-PC	Knuckle	Wide	52	120-277V	4000K	6823	131	5.5 (2.50)	Bronze
RFL3-50-5K-PC	Knuckle	Wide	52	120-277V	5000K	6654	128	5.5 (2.50)	Bronze

#### **ORDERING GUIDE**

**Example:** RFL2-44L-25-4K7-M-UNV-K-DBT-CD-SP





<sup>1</sup> SP and PC cannot be in the same fixture due to space constraints

#### ACCESSORIES AND REPLACEMENT PARTS (ORDERED SEPARATELY)

	Catalog Number	Description				
	TRN-XX1	Trunnion adapter for ½" threaded knuckle mount				
1	Specify finish color to match fixture, e.g. DBT - Dark Bronze Matte					



TRN-XX



DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #	

#### PERFORMANCE DATA

					5K (5000K nominal, 70 CRI)		4K (4000K nominal, 70 CRI)			3K (3000K nominal, 70 CRI)			
Series	Nominal Watts	Dist. Type	NEMA	Field Angle H° X V°	Lumens	LPW <sup>1</sup>	Max Beam Candlepower	Lumens	LPW <sup>1</sup>	Max Beam Candlepower	Lumens	LPW <sup>1</sup>	Max Beam Candlepower
		Ν	2 x 2	20 x 20	3308	129	56009	3391	132	57425	3285	128	55632
RFL2	25	М	4 × 4	57 x 57	3124	121	7180	3203	124	7588	3103	120	7426
		W	6 x 6	105 x 105	3245	124	1848	3327	127	1895	3223	123	1836
		N	2 x 2	20 x 20	4525	136	76622	4639	139	69924	4494	135	76107
	40	М	4 x 4	57 x 57	4273	127	10228	4382	130	10486	4245	126	10159
DELO		W	6 x 6	105 x 105	4439	131	2528	4551	134	2592	4409	130	2511
RFL3		N	2 x 2	20 x 20	6784	133	114868	6956	136	117772	6739	132	114095
	50	М	4 × 4	57 x 57	6408	125	17055	6569	128	17486	6364	124	16940
		W	6 x 6	105 x 105	6654	128	3791	6823	131	3886	6610	127	3765

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

#### **ELECTRICAL DATA**

# LEDS	Nominal Wattage	Input Voltage	Oper. Current (Amps)	System Power (W)
		120	0.22	
DELO	25	208	0.13	20.0
RFL2	25	240	0.11	26.0
		277	0.09	
		120	0.28	
	40	208	0.16	33.8
	40	240	0.14	33.0
DELO		277	0.12	
RFL3		120	0.43	
	F0	208	0.25	F17
	50	240	0.22	51.7
		277	0.19	

#### PROJECTED LUMEN MAINTENANCE

Ambient Temperature	0	25,000	50,000	TM-21-11 60,000 <sup>1</sup>	100,000	Calculated L70 (Hours)
25°C / 77°C	1.00	0.96	0.94	0.91	0.83	> 191,000
40°C / 104°F	0.99	0.95	0.93	0.93	0.81	> 173,000

#### LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Te	Ambient Temperature					
0° C	32° F	1.03				
10° C	50° F	1.01				
20° C	68° F	1.00				
25° C	77° F	1.00				
30° C	86° F	0.99				
40° C	104° F	0.98				
50° C	122° F	0.97				

Use these factors to determine relative lumen output for average ambient temperatures from  $0-40^{\circ}\text{C}$  (32–104°F)





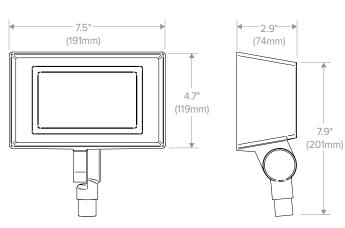
# **Ratio Flood**

COMPACT

DATE:	LOCATION:
TYPE:	PROJECT:

#### **DIMENSIONS**

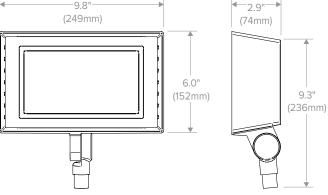
RFL2



RFL2 EPA(Front/Side) 0.34ft² / 0.17ft²

CATALOG #:

# 9.8" (249mm)



RFL3 EPA(Front/Side) 0.97ft² / 0.20ft²

#### **ADDITIONAL INFORMATION**

#### SHIPPING INFORMATION

Catalan Numban	C.W./kg//CTN	Carton Dimensions				
Catalog Number	G.W (kg)/CTN	Length Inch (cm)	Width Inch (cm)	Height Inch (cm)		
RFL2	3.7lbs (1.68kg)	20.7 (52.7)	15.1 (38.4)	6.9 (17.6)		
RFL3	5.5lbs (2.50kg)	25 (63.5)	15.1 (38.4)	6.9 (17.6)		

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TRP2/RDI2 Low Glare

Cat.#

Job

Type



Approvals

#### **SPECIFICATIONS**

#### Applications:

Medium sized architectural wallpacks in two stylish shapes accentuate building architecture and provide excellent illumination and uniformity

#### Construction:

- Die-cast aluminum housing and door
- · Seven powder coat standard finishes, plus custom color options

#### LED/Optics:

- Precision crafted optics and reflectors provide up to 150 LPW and zero pixelation over the lens for maximum visual comfort
- · Wide Throw and Forward Throw distributions
- 3000K 70 CRI, 4000K 70 CRI, and 5000K -70 CRI, CCT nominal

#### Electrical:

- Optional Dual Drivers & Dual Power Feeds for 50 and 70 watt versions
- 120-277, 347 and 480 voltage, 50/60Hz
- Power factor > 90%
- THD (Total Harmonic Distortion) <20%
- Ambient operating temperature -40°C to 40°C

#### Installation/Mounting:

- · Quick-mount adapter with gasket seal provides easy installation to wall or to recessed junction box (4" square junction box). Fixture attaches by two Allen-head hidden fasteners for tamper resistance.
- Black box accessory available for surface conduit application

#### Options/Controls:

- Drivers are 0-10V dimming standard
- · Universal button photocontrol for dusk to dawn energy savings
- · Occupancy sensor options available for complete on/off and dimming control

#### **Secondary Distribution:**

- Optional secondary distributions provide approximately 5% uplight for lighting building facades and/or providing direct/indirect lighting for under canopy applications
- · Available in three distribution including Wall Graze, Spot/Column and Canopy

#### Listings:

- IP65 rated housing
- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Zero uplight (U0), dark sky, neighbor friendly (excludes uplight versions)
- Drivers IP66 and RoHS compliant

#### Warranty:

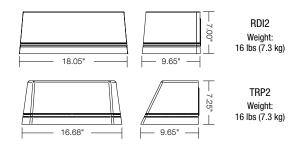
For more information visit: http://www.hubbelloutdoor.com/resources warranty/

#### PRODUCT IMAGE(S)



Radius

#### **DIMENSIONS**



#### SHIPPING INFORMATION

Cotolog	C W/km\/	Carton Dimensions					
Catalog Number	G.W(kg)/ CTN	Length Inch (cm)	Width Inch (cm)	Height Inch (cm)			
RDI2	18 (8.2)	20.5 (52)	9.5 (24)	12 (30)			
TRP2	16 (7.3)	18.5 (47)	9.5 (24)	11.5 (29)			

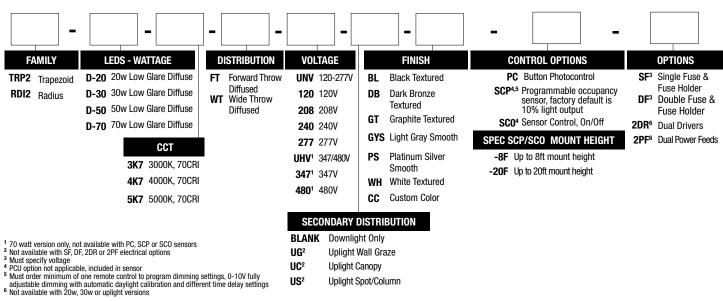
#### **CERTIFICATIONS/LISTINGS**







#### ORDERING INFORMATION ORDERING EXAMPLE: TRP2-D-30-3K7-FT-UNV-UG-GT-PC



#### **ACCESSORIES** - Order separately

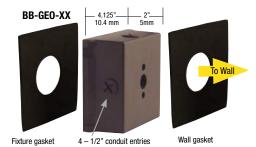
Catalog Number	Description
SCP-REMOTE*	Remote control for SCP option. Order at least one per project to program and control dimming settings
BB-GEO-XX	Black box with 4 - 1/2" threaded conduit holes, specify finish by replacing "XX" with finish selection, eq. Dark Bronze "DB"

Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings. When ordering with SiteSync, one of the following interface options must be chosen an ordered separately. Each option contains the SiteSync License, GUI and Bridge Node.

\* If needed, an additional Bridge Node can be ordered.



**BB-GEO-XX** – Mounted to luminaire

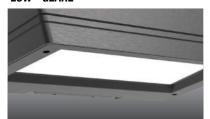


#### **INPUT POWER CONSUMPTION**

# OF LEDS	VERSION	INPUT VOLTAGE (V)	CURRENT (Amps)	SYSTEM POWER (w)
		120	0.18	21
180	Downlight Only	277	0.08	21
		120	0.28	33
		277	0.12	33
		120	0.41	49
		277	0.18	49
		120	0.52	62
		277	0.22	62
		347	0.18	62
		480	0.13	62
100	With Uplight	120	0.18	22
		277	0.08	22
		120	0.29	35
		277	0.13	35
		120	0.43	52
		277	0.19	52
		120	0.55	66
		277	0.24	66
		347	0.19	66
		480	0.14	66

PERFORMANCE DATA - LOW GLARE			5K			4K					3K							
			(5000K nominal, 70 CRI)				(4000K nominal, 70 CRI)				(3000K nominal, 70 CRI)							
SECONDARY	NOMINAL	SYSTEM	MAIN DISTR.															
DISTRIBUTION	WATTS	WATTS	TYPE	LUMENS	LPW	В	U	G	LUMENS	LPW	В	U	G	LUMENS	LPW	В	U	G
	D-20	21.0	FT	3.082	147	1	0	1	3.067	146	1	0	1	2,883	137	1	0	1
			WT	3,195	152	1	0	0	3,179	151	1	0	0	2,988	142	1	0	0
	D 00	00.4	FT	4,995	150	1	0	1	4,970	149	1	0	1	4,672	140	1	0	1
None	D-30	33.4	WT	5,178	155	1	0	1	5,152	154	1	0	1	4,843	145	1	0	1
None	D-50	48.7	FT	7,094	146	1	0	1	7,058	145	1	0	1	6,635	136	1	0	1
	ט-50	48.7	WT	7,353	151	1	0	1	7,316	150	1	0	1	6,877	141	1	0	1
	D-70	61.8	FT	8,669	140	1	0	1	8,626	140	1	0	1	8,108	131	1	0	1
	D-70	01.0	WT	8,986	145	1	0	1	8,941	145	1	0	1	8,405	136	1	0	1
	D-20	22.3	FT	2,991	134	1	3	1	2,976	133	1	3	1	2,798	125	1	3	1
	D-20	22.3	WT	3,325	149	1	3	0	3,309	148	1	3	0	3,110	139	1	3	0
	D-30	35.5	FT	4,847	137	1	3	1	4,823	136	1	3	1	4,534	128	1	3	1
UC	D-30		WT	5,389	152	1	3	1	5,362	151	1	3	1	5,040	142	1	3	1
(Canopy)	D-50	51.7	FT	6,884	133	1	3	1	6,850	132	1	3	1	6,439	125	1	3	1
			WT	7,653	148	1	3	1	7,615	147	1	3	1	7,158	138	1	3	1
	D-70	65.7	FT	8,413	128	1	3	1	8,371	127	1	3	1	7,869	120	1	3	1
			WT	9,353	142	1	3	1	9,306	142	1	3	1	8,748	133	1	3	1
	D-20	22.3	FT	2,966	133	1	3	1	2,952	132	1	3	1	2,774	124	1	3	1
			WT	3,302	148	1	3	0	3,286	147	1	3	0	3,089	139	1	3	0
	D-30	35.5	FT	4,808	135	1	3	1	4,784	135	1	3	1	4,497	127	1	3	1
UG			WT	5,352	151	1	3	1	5,325	150	1	3	1	5,006	141	1	3	1
(Wall Graze)	D-50	0 51.7	FT	6,827	132	1	3	_1_	6,793	131	1	3	1	6,386	124	1	3	1
			WT	7,600	147	1	3	_1_	7,562	146	1	3	1	7,109	137	1	3	1
	D-70	65.7	FT	8,344	127	1	3	1	8,302	126	1	3	1	7,804	119	1	3	1
			WT	9,288	141	1	3	_1_	9,242	141	1	3	1	8,687	132	1	3	1
	D-20	22.3	FT	3,156	142	1	3	_1_	3,140	141	1	3	1	2,952	132	1	3	1
			WT	3,316	149	1	3	0	3,300	148	1	3	0	3,102	139	1	3	0
US (Spot/	D-30	35.5	FT	5,114	144	1	3	_1_	5,089	143	1	3	1	4,784	135	1	3	1
	D 00	00.0	WT	5,375	151	11	3	_1_	5,348	151	1	3	1	5,027	142	1	3	1
Column)	D-50	51.7	FT	7,263	140	1	3	_1_	7,227	140	1	3	1	6,793	131	1	3	1
ļ	2 00	01.7	WT	7,633	148	1	3	_1_	7,595	147	1	3	1	7,140	138	1 1	3	
	D-70	65.7	FT	8,876	135	1	3	_1_	8,832	134	1	3	1	8,302	126	1	3	
	570	00.7	WT	9,328	142	1	3	1	9,282	141	1	3	1	8,725	133	1	3	1

#### LOW - GLARE



Designed for optimal visual comfort and maximum performance, the low glare versions provide excellent illumination and uniformity with zero LED pixelation.

#### **UPLIGHT**



Optional uplight distributions provide accent lighting for columns, canopies or building

The wall graze also creates a 50/50 appearance on the wall while still providing general illumination on the ground

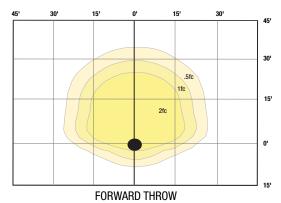
#### **CONTROL OPTIONS**

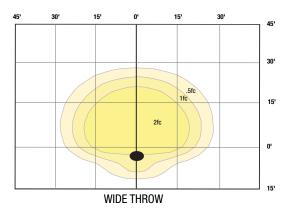


Programmable occupancy sensor offers greater control and energy savings with adjustable delay and dimming levels (Factory default is 10%).

#### **PHOTOMETRICS**

Mounting Height 15ft





#### **UPLIGHT GRAZE**



#### **UPLIGHT SPOT/COLUMN**

