

## DESCRIPTION

Low brightness 4-1/2" aperture LED adjustable accent fixture with choice of distribution. Adjustment mechanism enables the LED beam to pivot through the center of the aperture at the ceiling line, allowing maximum light output with no flashback. Offered with flat cut, adjustable accent, pinhole, and lensed wall wash trims. Available with dim-to-warm technology – similar to halogen at full power, the 3000K LED warms smoothly as dimmed to 1850K creating a rich warm glow within the space.

Catalog #		Type
Project		
Comments		Date
Prepared by		

## SPECIFICATION FEATURES

### Lower Reflector

Spun 0.050" aluminum. Available in a variety of Alzak® and painted finishes. Two torsion springs pull trim tight to ceiling. Truncated adjustable cut cone allows for full tilt range and flexibility. Lensed wall wash provides even illumination on vertical surfaces. Pinhole includes black occlus to control glare.

### Upper Reflector

Field interchangeable optics in 15°, 25° or 35° provides smooth beam without color separation. Media holder fits onto upper reflector and holds up to two lens media.

### Trim Ring

Self flanged or white polymer trim ring.

### Adjustment Mechanism

Stable aiming and locking mechanism allows smooth 362° rotation and 40° elevation adjustment. Aiming scale enables consistent setting across multiple fixtures.

### Housing

One piece die cast 1-1/4" deep collar. 18 gauge CRS housing is painted matte black to eliminate stray light. Housing is toolless top accessible.

### Universal Mounting Bracket

Accepts 1/2" EMT, C Channel, T bar fasteners and hanger bars. Provides 5" total adjustment.

### Thermal

Aluminum heat sink conducts heat away from the LED module for optimal performance and longer life.

### LED

LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector producing even distribution with no pixilation. Lumen output shall not decrease by more than 10% over the minimum life of 55,000 hours (L90 > 55,000 hours). Auto resetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded. Color variation within 3-step MacAdam ellipses. D2W™ – dim-to-warm shifts CCT from 3000K to 1850K as fixture dims mimicking halogen sources.

### Driver

Combination 120-277V 0-10V or 120V trailing edge phase cut driver provides flicker free dimming from 100% to 10%. Optional 1% 0-10V, Fifth Light, or DMX. Driver can be serviced from above or through the aperture.

### Connected Lighting Systems

Field installed WaveLinX accessory tile mount sensor kit. The WTA WaveLinX tile mount sensor kit offers daylight dimming, PIR motion sensing control, and optional RLTS - Real Time Location Services available. (Refer to WaveLinX system specifications and application guides for details)

The WTA WaveLinX kit includes control module that mounts on the luminaire electrical junction box via 1/2" knock-out, and tilemount sensor with direct-mount spring clips or for octagon ceiling box with included mounting bracket. (Field mount kit ordered and installed separately).

Enlighted wireless tile mount sensor and relay accessory enables wireless control using a tile mount sensor accessory.

### Code Compliance

Thermally protected and cULus listed for damp locations with flat cut, pinhole or angle cut and wet location covered ceiling with lensed or lensed wall wash. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. 2800 lumen Non-IC rated - Insulation must be kept 3" from top and sides of housing. IC rated up to 1800 lumen. RoHS Compliant. 2800 lumen and above spacing and must follow spacing requirements. Photometric testing completed in accordance with IES LM 79 standards. Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.

### Warranty

5 year warranty.



## LDA4A 4L

900, 1300, 1800, 2800 Lumen LED

4-Inch  
Adjustable  
Slope  
Wall Wash  
New Construction

### ENERGY DATA

Sound Rating: Class A standards	
T ambient -40 + 40°C	
Power Factor: >0.90	
THD < 20%	

### 900 Lumen

	120V	277V
Input Power	13.8W	15.0W
Input Current	0.12A	0.06A
Inrush Current	0.49A	0.85A

### 1300 Lumen

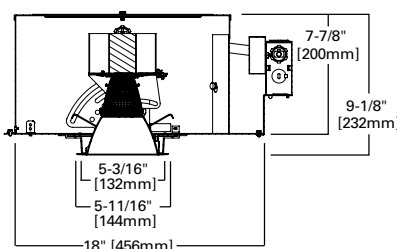
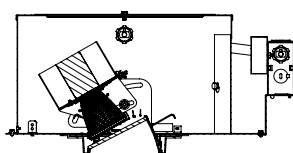
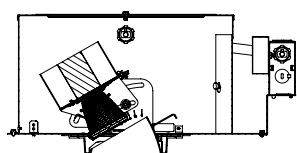
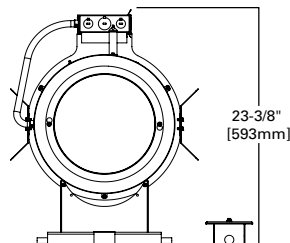
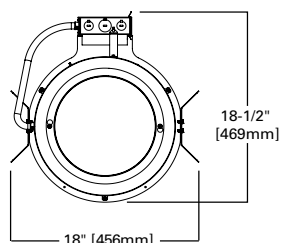
	120V	277V
Input Power	22.9W	22.9W
Input Current	0.19A	0.09A
Inrush Current	0.72A	0.53A

### 1800 Lumen

	120V	277V
Input Power	29.1W	29.4W
Input Current	0.24A	0.12A
Inrush Current	0.79A	1.09A

### 2800 Lumen

	120V	277V
Input Power	44.5W	44.2W
Input Current	0.37A	0.17A
Inrush Current	1.09A	1.23A



Refer to ENERGY STAR® Qualified Products List.

## ORDERING INFORMATION

SAMPLE NUMBER: LDA4A09835D010TE

Housing	Lumens <sup>1</sup>	CRI	CCT	Driver <sup>11</sup>	Options <sup>3,7</sup>
<b>LDA4A</b> =4" Aperture adjustable/slope <b>LDA4ACP</b> =4" Aperture adjustable/slope, Chicago Plenum	<b>09</b> =900 (IC Rated) <b>13</b> =1300 (IC Rated) <b>18</b> =1800 (IC Rated) <b>28</b> =2800 (Non-IC) <sup>6</sup>	<b>8</b> =80 CRI <b>9</b> =90 CRI	<b>27</b> =2700K <b>30</b> =3000K <b>35</b> =3500K <b>40</b> =4000K <b>30D2W</b> = Dim to warm 3000K to 1850K (1800 lumen and below, 90 CRI) <sup>8</sup>	<b>900, 1300, 1800 and 2800 Lumen</b> <b>D010TE</b> =120-277V 0-10V 1% dimming or trailing edge 120V <b>D5LT</b> =120-277V Fifth Light DALI 0% dimming <b>DE010</b> =120-277V 0-10V 0% dimming <b>DLT</b> =Hi-Lume Forward Phase 2-wire dimming 120V <b>DMX</b> =120-277V DMX 0% dimming  <b>900, 1300 and 1800 Lumen</b> <b>D010TR</b> =120-277V 0-10V 1% dimming or leading edge 120V	<b>EMBOD</b> =7W Bodine® Emergency Module with Remote Test Switch <b>EMBOD7ST</b> =Bodine® Emergency Module with Self Test Remote Test Switch <b>EM7</b> =7W Emergency Module with Remote Test Switch <b>EM14</b> =14W Emergency Module with Remote Test Switch

SAMPLE NUMBER: LAR25NF

Beam Forming Reflector
<b>LAR15SP</b> =15° optic <b>LAR25NF</b> =25° optic <b>LAR35FL</b> =35° optic

SAMPLE NUMBER: 4LLWW1LI

Reflector	Finish	Options
<b>4LA0</b> =4" Adjustable Accent, Polymer Trim Ring <b>4LA1</b> =4" Adjustable Accent, Self Flanged <b>4LLWW0</b> =4" Lensed Wall Wash, Polymer Trim Ring <sup>9</sup> <b>4LLWW1</b> =4" Lensed Wall Wash, Self Flanged <sup>9</sup> <b>4LAL0</b> =4" Lensed Adjustable Accent, Polymer Trim Ring <b>4LAL1</b> =4" Lensed Adjustable Accent, Self Flanged <b>4LFC0</b> =Flat Cut Cone, Polymer Trim Ring <b>4LFC1</b> =Flat Cut Cone, Self Flanged <b>4LAPIN</b> =4" Pinhole <sup>4</sup>	<b>LI</b> =Specular Clear <b>H</b> =Semi-Specular Clear <b>WMH</b> =Warm Haze <b>G</b> =Specular Gold <b>WH</b> =Wheat <b>WHH</b> =Wheat Haze <b>GP</b> =Graphite <b>GPH</b> =Graphite Haze <b>B</b> =Specular Black <b>MW</b> =Matte White	<b>Self-Flanged Only</b> <b>WF</b> =White Painted Flange

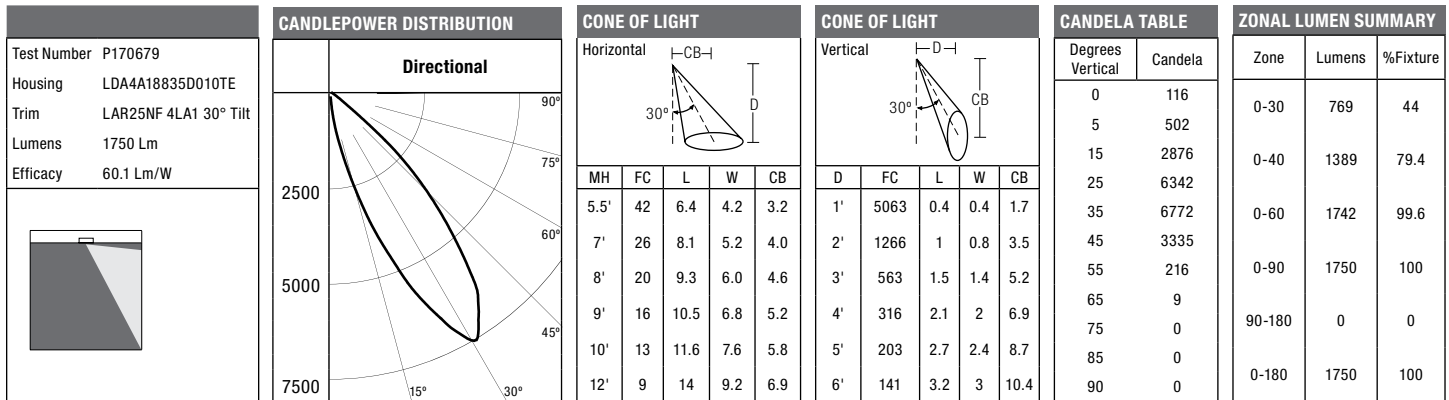
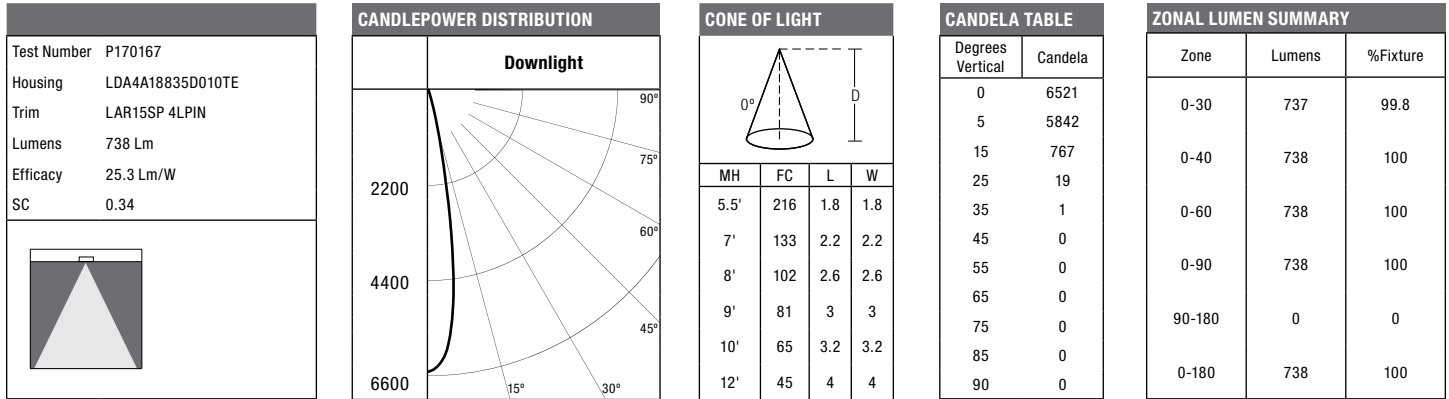
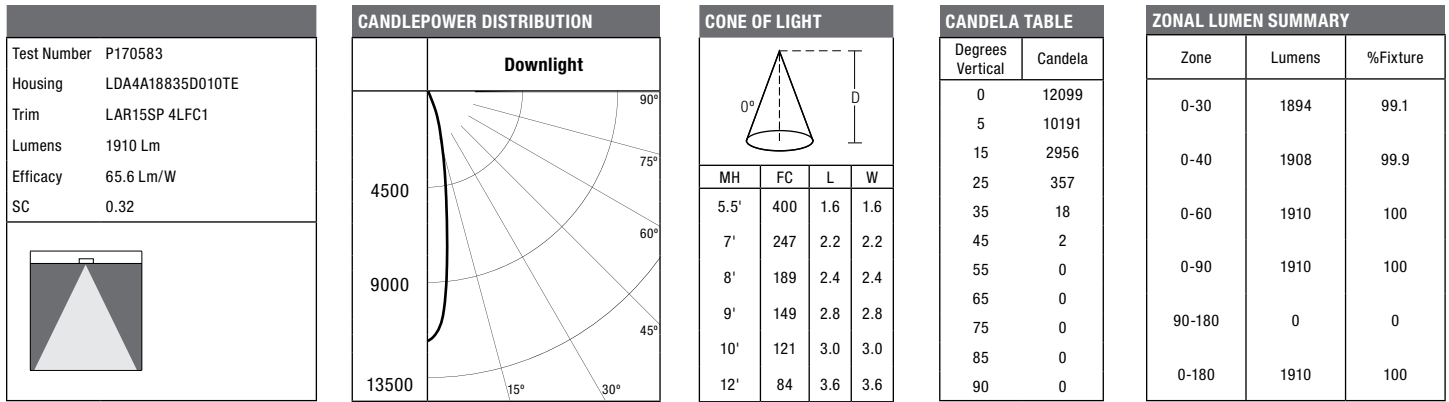
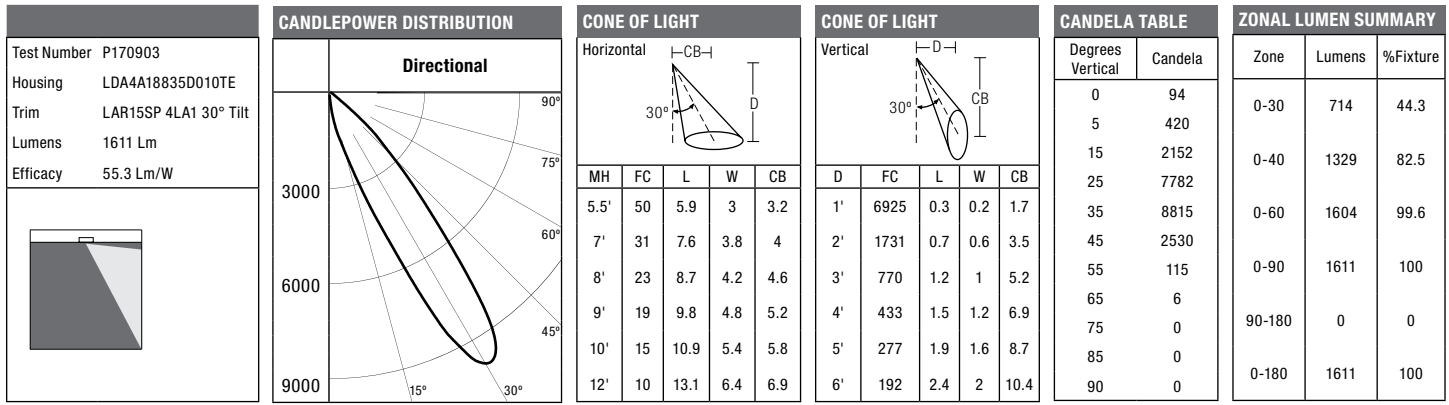
## Accessories

<b>LGSKT4IP66</b> =IP66 Gasket Kit <sup>5</sup>  <b>Bar Hangers</b> <b>HB26</b> =C-channel Bar Hanger, 26" Long, Pair <b>HB50</b> =C-channel Bar Hanger, 50" Long, Pair <b>RMB22</b> =Wood Joist Bar Hanger, 22" Long, Pair  <b>Transformers</b> <b>H347</b> =347 to 120V Step Down Transformer, 75VA <b>H347200</b> =347 to 120V Step Down Transformer, 200VA  <b>Connected Lighting Systems</b> <b>PORLWTPD1</b> =Enlighted wireless sensor kit (0-10V only) <b>WTA</b> =WaveLinx wireless sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only (Refer to WaveLinx system specifications and guides for details) Field installed <sup>12</sup>	<b>Color Filters</b> <b>F22-20</b> =Red <b>F33-20</b> =Blue <b>F44-20</b> =Green <b>F55-20</b> =Yellow <b>F66-20</b> =Mercury  <b>Dichronic Filters</b> <b>F71-20</b> =Peach <b>F72-20</b> =Amber <b>F73-20</b> =Green <b>F74-20</b> =Medium Blue <b>F75-20</b> =Yellow <b>F76-20</b> =Red <b>F77-20</b> =Dark Blue <b>F78-20</b> =Light Blue <b>F79-20</b> =Neutral Density <b>F80-20</b> =Magenta	<b>Beam-Modifying Lenses</b> <b>LSL-20</b> =Linear Spread Lens <b>OSL-20</b> =Overall Spread Lens <b>DIF-20</b> =Diffused Lens  <b>Louvers</b> <b>LVR-20</b> =Hex Cell Louver  <b>Snoot</b> <b>PLNC-SN-B</b> =Snoot
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## Notes:

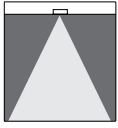
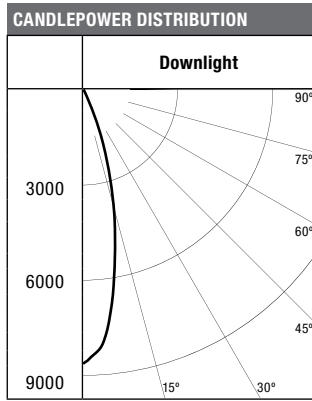
- Nominal Lumens will vary depending on selected color, driver and reflector finish.
- Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).
- Not available with Chicago Plenum and requires above ceiling access. Not for use with insulation.
- Pinhole finish standard white with black occlusus (omit finish code).
- Required for T-24 compliance with lensed trims.
- Product is marked spacing and must be installed with the following minimum spacing:  
Center to center of adjacent luminaires: 36"  
Center of luminaire to side of building member: 18"  
Minimum overhead clearance: 1/2"
- Not CSA approved.
- Includes 30° distribution diffuse lens. Order with LARL15SP upper reflector. Reference ies files for output.
- Use with narrow flood beam forming reflector and 30° tilt.
- DMX fixtures default to full on upon loss of DMX signal.
- Consult dimming guide for performance.
- Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V driver.

PHOTOMETRICS

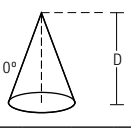


**PHOTOMETRICS**

Test Number P170615  
 Housing LDA4A18835D010TE  
 Trim LAR25NF 4LFC1  
 Lumens 2070 Lm  
 Efficacy 71.1 Lm/W  
 SC 0.46

**CONE OF LIGHT**



MH	FC	L	W
5.5'	287	2.4	2.4
7'	177	3.0	3.0
8'	136	3.6	3.6
9'	107	4.0	4.0
10'	87	4.4	4.4
12'	60	5.4	5.4

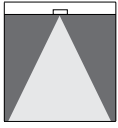
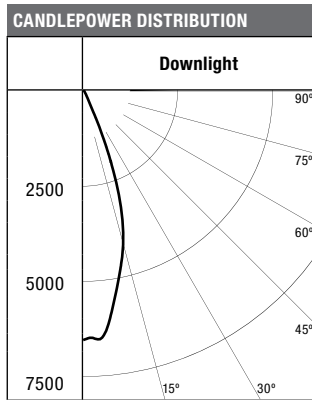
**CANDELA TABLE**

Degrees Vertical	Candela
0	8687
5	7947
15	3834
25	465
35	28
45	3
55	0
65	0
75	0
85	0
90	0

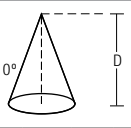
**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixture
0-30	2044	98.8
0-40	2067	99.9
0-60	2070	100
0-90	2070	100
90-180	0	0
0-180	2070	100

Test Number P170647  
 Housing LDA4A18835D010TE  
 Trim LAR35FL 4LFC1  
 Lumens 2153 Lm  
 Efficacy 73.9 Lm/W  
 SC 0.6

**CONE OF LIGHT**



D	FC	L	W
5.5'	219	3.2	3.2
7'	135	4.0	4.0
8'	104	4.6	4.6
9'	82	5.2	5.2
10'	66	5.8	5.8
12'	46	7	7

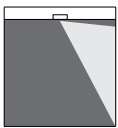
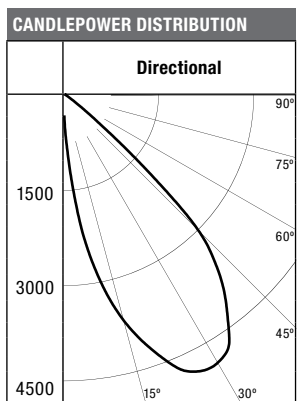
**CANDELA TABLE**

Degrees Vertical	Candela
0	6625
5	6511
15	4203
25	623
35	34
45	2
55	0
65	0
75	0
85	0
90	0

**ZONAL LUMEN SUMMARY**

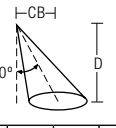
Zone	Lumens	%Fixture
0-30	2121	98.5
0-40	2150	99.9
0-60	2153	100
0-90	2153	100
90-180	0	0
0-180	2153	100

Test Number P174896  
 Housing LDA4A18835D010TE  
 Trim LAR35FL 4LA1 30° Tilt  
 Lumens 1843 Lm  
 Efficacy 63.3 Lm/W

**CONE OF LIGHT**

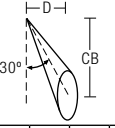
Horizontal



MH	FC	L	W	CB
5.5'	45	5.3	4.6	3.2
7'	28	6.9	5.8	4
8'	21	7.8	6.8	4.6
9'	17	8.8	7.6	5.2
10'	14	9.8	8.4	5.8
12'	10	11.8	10.2	6.9

**CONE OF LIGHT**

Vertical



D	FC	L	W	CB
1'	3506	0.5	0.6	1.7
2'	876	1.2	1.2	3.5
3'	390	1.9	1.8	5.2
4'	219	2.5	2.6	6.9
5'	140	3.2	3.2	8.7
6'	97	3.9	3.8	10.4

**CANDELA TABLE**

Degrees Vertical	Candela
0	342
5	1432
15	3794
25	4914
35	4619
45	2960
55	129
65	4
75	0
85	0
90	0

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixture
0-30	948	51.4
0-40	1514	82.1
0-60	1837	99.7
0-90	1843	100
90-180	0	0
0-180	1843	100

**PHOTOMETRICS**

Test Number P170871 Housing LDA4A18835D010TE Trim LAR35FL 4LLWW1 Lumens 1600 Lm Efficacy 54.9 Lm/W	<b>CANDLEPOWER DISTRIBUTION</b>					<b>CONE OF LIGHT</b>					<b>CONE OF LIGHT</b>					<b>CANDELA TABLE</b>		<b>ZONAL LUMEN SUMMARY</b>																																																																																																																
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0-30	596	37.2																																																																																																																																
0-40	1043	65.2																																																																																																																																
0-60	1556	97.3																																																																																																																																
0-90	1600	100																																																																																																																																
90-180	0	0																																																																																																																																
0-180	1600	100																																																																																																																																

SINGLE UNIT FOOTCANDLES								MULTIPLE UNIT FOOTCANDLES					
DD	2' FROM WALL (Distance From Fixture Along Wall)							2' FROM WALL (Spacing Between Fixtures)			3' FROM WALL (Spacing Between Fixtures)		
	●	1'	2'	3'	4'	5'	6'	●	2' apart	●	●	3' apart	●
1'	26.7	10.8	1.2	0.1	0	0	0	27.9	21.6	27.9	2.3	1.5	2.3
2'	142.2	70.1	15	2.7	0.5	0.1	0	157.2	140.1	157.2	31.9	26.3	31.9
3'	103.8	66.8	23.4	6.7	1.7	0.4	0.2	127.3	133.6	127.3	69.9	62.3	69.9
4'	55.3	41	19.8	8.1	2.8	0.9	0.4	75.1	82	75.1	64.7	66.1	64.7
5'	28.6	23.1	13.8	7.1	3.2	1.3	0.6	42.4	46.2	42.4	48.1	51.4	48.1
6'	15.6	13.3	9.1	5.5	2.9	1.5	0.8	24.7	26.6	24.7	33.4	36.4	33.4
7'	9.1	8	5.9	4.1	2.5	1.4	0.8	15	16	15	22.7	24.9	22.7
8'	5.6	5	4	2.9	2	1.2	0.8	9.5	10	9.5	15.7	17	15.7
9'	3.6	3.3	2.8	2.1	1.6	1.1	0.7	6.4	6.6	6.4	11	11.8	11
10'	2.4	2.2	1.9	1.6	1.2	0.9	0.7	4.4	4.5	4.4	7.8	8.4	7.8

**EM MULTIPLIER DATA**

LUMENS	EM MULTIPLIER	
	7	14
900/1000	0.50	0.99
1300/1500	0.29	0.57
1800/2000	0.22	0.44
2800/3000	0.16	0.32