

DESCRIPTION

Recessed 6-inch LED shallow lens downlight is available in various distributions, lumen and CRI/CCT options. Suitable for shallow commercial construction and can be used for both new or renovation work. Optional non-conductive polymer "Dead Front" trim available. Insulation must be kept 3" from top and sides of housing. Use for general area lighting where high efficiency and visual comfort are required.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

MECHANICAL

Frame

Boat shaped galvanized steel frame with adjustable plaster lip accommodates ceilings up to 1/2" - 2" thick. May be used for new construction or remodeling installations. Provided with (2) remodel clips to secure frame when installed from below the ceiling.

Mounting Brackets

Bar hanger receivers adjusts 2" vertically from above the ceiling or thru the aperture. Use with No Fuss™ bar hangers or with 1/2" EMT. Removable to facilitate installation from below the ceiling.

No Fuss™ Bar Hangers

Captive preinstalled bar hanger locks to tee grid with a screwdriver or pliers. Centering mechanism allows consistent positioning of fixtures.

OPTICAL

LED Module

Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation. Available in 80 or 90 CRI minimum, accuracy within 3 SDCM provides color uniformity. See ordering information for available CRI / CCT options. Passive thermal management achieves L70 at 50,000 hours in non IC applications. Integral diffuse lens provides visual shielding. Integral connector allows quick connection to housing flex.

Beam Forming Optics

Optional beam forming optics replace diffuse lens and provide narrow flood or flood distribution for long throws of light.

Reflector

Standard one piece parabolic aluminum reflector combines high optical efficiency with visual comfort. Non-conductive polymer "Dead Front" trim also available. Attaches to LED module with (3) speed clamps minimizing light leaks to lens. Self-flanged standard with an optional white painted flange.

Trim Retention

Reflectors are retained with two torsion springs holding the flange tightly to the finished ceiling surface.

ELECTRICAL

Junction Box

(6) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (12) #12 AWG (six in, six out) 90°C conductors and feed thru branch wiring.

Driver

Integral UNV 120 - 277V 50/60 Hz constant current driver provides noise free operation. For 347V input use Halo transformer H347 or H347200. Continuous, flicker-free dimming from 100% to 10% with leading or trailing edge phase cut at 120V or 0 -10V analog control.

Emergency Option

Provides 90 minutes of standby lighting meeting most life safety codes for egress lighting. Available with remote charge indicator and test switch.

Compliance

- cULus listed for wet location
- IP66 Ingress Protection Rated
- Certified for wet locations, insulation must be kept 3" from top and sides.
- Airtight per ASTM-E283.
- Optional City of Chicago environmental air (CCEA) marking for plenum applications.
- EMI/RFI emissions per FCC 47CFR Part 18 non-consumer limits.
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79-08.
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.
- Can be used to comply with California Title 24 Non-Residential Lighting Controls requirements as a LED Luminaire.
- ENERGY STAR® listed for commercial applications, reference database for current listings.



PD610
PD615
PD620
PD630

PDM6A

64V
64VDFW

1000, 1500,
2000 & 3000
Lumen Series

LED
6-Inch Aperture
Shallow Lens
Downlight



THD: ≤ 20%
PF: ≥ 0.90
T Ambient -30 - +40°C
Sound Rating ≤ 22dba

Lumens	1000 Series	
Input Voltage	120V	277V
Input Current	.103 A	.058 A
Input Power	12.1 W	13.2 W
Efficiency	88 LPW	88 LPW
Inrush Current	.037 A	.077 A

Lumens	1500 Series	
Input Voltage	120V	277V
Input Current	.146 A	.072 A
Input Power	17.1 W	17.9 W
Efficiency	87 LPW	87 LPW
Inrush Current	.047 A	1.04 A

Lumens	2000 Series	
Input Voltage	120V	277V
Input Current	.175 A	.086 A
Input Power	20.78 W	21.06 W
Efficiency	89 LPW	89 LPW
Inrush Current	.054 A	1.21 A

Lumens	3000 Series	
Input Voltage	120V	277V
Input Current	.299 A	.145 A
Input Power	35.72 W	36.4 W
Efficiency	82 LPW	82 LPW
Inrush Current	.085 A	2.0 A

ORDERING INFORMATION

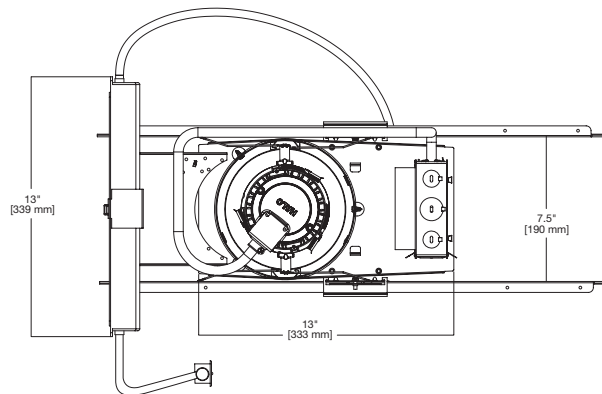
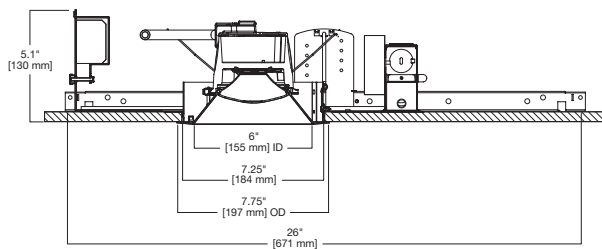
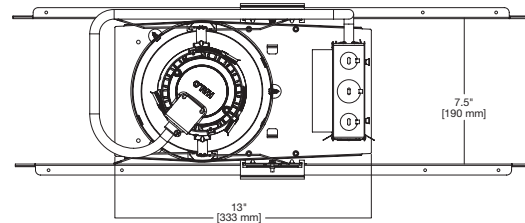
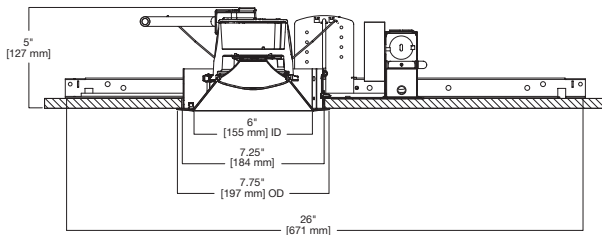
SAMPLE NUMBER: PD610ED010REM-PDM6A827-64VC

A complete luminaire consists of a housing, LED module and reflector, order separately.

Housing	Lumens	Driver	Options	LED Module	CRI/CCT
PD6 = 6" aperture LED downlight PD6CP = 6" aperture LED downlight, CCEA listed for City of Chicago plenum requirements	10 = 1,000 lumens (nominal) 15 = 1,500 lumens (nominal) 20 = 2,000 lumens (nominal)	ED010 = 120-277V 50/60Hz, 0-10V and LE/TE phase cut dimming	REM = Emergency operation with remote indicator and test switch (not available with PD6CP housing)	PDM6A = Downlight LED module for PD6 housing, provides 1,000, 1,500, 2,000, or 3,000 lumens (nominal) depending on connected housing type	827 = 80 CRI, 2700K CCT 927 = 90 CRI, 2700K CCT 830 = 80 CRI, 3000K CCT 930 = 90 CRI, 3000K CCT 835 = 80 CRI, 3500K CCT 935 = 90 CRI, 3500K CCT 840 = 80 CRI, 4000K CCT 940 = 90 CRI, 4000K CCT
	30 = 3,000 lumens (nominal)	D010 = 120-277V 50/60Hz, 0-10V dimming (3,000 lumen only)			

Reflector	Finish Option	Flange Option	Accessories
64V = 6" shallow parabolic reflector 64VDFW = 6" non-conductive polymer shallow parabolic reflector (white finish only)	C = Specular clear G = Specular gold H = Semi-specular clear W = White (white flange)	Blank = Polished flange standard with C, G, & H reflector finishes Blank = White flange standard with W WF = White flange option available with C, G, & H reflector finishes	HB128APK = L channel hanger bar, 26", "No-Fuss", pair (replacement) RMB22 = 22" long wood joist mounting bars, pair BFR56NFL = Beam forming reflector kit, narrow flood distribution BFR56FL = Beam forming reflector kit, flood distribution BFR56MH = Media holder, accepts one 3.45" lens L345SF = 3.45" diameter soft focus lens H347 = Step down transformer for 347V input, 75VA max H347200 = Step down transformer for 347V input, 200VA max PORLWTPD1 = LumaWatt Pro Wireless Sensor Kit (0-10V only)

DIMENSIONS



COMPLIANCE TABLE

1000 LUMEN

80 CRI																
Catalog #	PD610ED010- PDM6A827				PD610ED010- PDM6A830				PD610ED010- PDM6A835				PD610ED010- PDM6A840			
	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24
64VC	1111	83			1194	89			1267	95			1277	95		
64VCWF	1090	81			1172	87			1243	93			1254	94		
64VDFW	1039	86			1124	93			1189	98			1194	99		
64VG	1092	81			1173	88			1245	93			1256	94		
64VGWF	1079	80			1159	87			1230	92			1241	93		
64VH	1069	80			1149	86			1219	91			1229	92		
64VHWF	1063	79			1143	85			1213	90			1223	91		
64VW	1110	83			1193	89			1266	94			1277	95		

90 CRI																
Catalog #	PD610ED010- PDM6A927				PD610ED010- PDM6A930				PD610ED010- PDM6A935				PD610ED010- PDM6A940			
	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24
64VC	856	64			918	69			987	74			1094	82		
64VCWF	840	63			901	67			969	72			1074	80		
64VDFW	795	66			857	71			919	76			1028	85		
64VG	841	63			902	67			970	72			1075	80		
64VGWF	831	62			891	67			959	72			1063	79		
64VH	824	61			883	66			950	71			1053	79		
64VHWF	819	61			879	66			945	71			1048	78		
64VW	855	64			917	68			987	74			1094	82		

1500 LUMEN

80 CRI																
Catalog #	PD615ED010- PDM6A827				PD615ED010- PDM6A830				PD615ED010- PDM6A835				PD615ED010- PDM6A840			
	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24
64VC	1525	82			1639	89			1739	94			1754	95		
64VCWF	1497	81			1609	87			1707	92			1721	93		
64VDFW	1376	80			1488	87			1573	92			1580	92		
64VG	1499	81			1611	87			1709	92			1724	93		
64VGWF	1481	80			1592	86			1689	91			1703	92		
64VH	1467	79			1577	85			1673	90			1688	91		
64VHWF	1460	79			1569	85			1665	90			1679	91		
64VW	1524	82			1638	89			1738	94			1753	95		

90 CRI																
Catalog #	PD615ED010- PDM6A927				PD615ED010- PDM6A930				PD615ED010- PDM6A935				PD615ED010- PDM6A940			
	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24
64VC	1175	64			1260	68			1356	73			1502	81		
64VCWF	1153	62			1237	67			1331	72			1475	80		
64VDFW	1051	61			1134	66			1216	71			1360	80		
64VG	1155	62			1239	67			1332	72			1477	80		
64VGWF	1141	62			1224	66			1317	71			1459	79		
64VH	1131	61			1213	66			1304	71			1446	78		
64VHWF	1125	61			1207	65			1298	70			1438	78		
64VW	1174	63			1259	68			1355	73			1501	81		

ES ES = ENERGY STAR® Compliant

T24 T24 = Can be used to comply with California Title 24 Non-Residential

COMPLIANCE TABLE continued

2000 LUMEN

80 CRI																
Catalog #	PD620ED010- PDM6A827				PD620ED010- PDM6A830				PD620ED010- PDM6A835				PD620ED010- PDM6A840			
	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24
64VC	1855	84	ES	T24	1994	91	ES	T24	2116	96	ES	T24	2134	97	ES	T24
64VCWF	1821	83	ES	T24	1957	89	ES	T24	2076	94	ES	T24	2094	95	ES	T24
64VDFW	1743	84	ES	T24	1885	91	ES	T24	1994	96	ES	T24	2003	96	ES	T24
64VG	1823	83	ES	T24	1960	89	ES	T24	2079	95	ES	T24	2097	95	ES	T24
64VGWF	1802	82	ES	T24	1936	88	ES	T24	2054	93	ES	T24	2072	94	ES	T24
64VH	1785	81	ES	T24	1918	87	ES	T24	2036	93	ES	T24	2053	93	ES	T24
64VHWF	1776	81	ES	T24	1909	87	ES	T24	2025	92	ES	T24	2043	93	ES	T24
64VW	1854	84	ES	T24	1992	91	ES	T24	2114	96	ES	T24	2132	97	ES	T24

90 CRI																
Catalog #	PD620ED010- PDM6A927				PD620ED010- PDM6A930				PD620ED010- PDM6A935				PD620ED010- PDM6A940			
	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24
64VC	1430	65	ES	T24	1533	70	ES	T24	1649	75	ES	T24	1828	83	ES	T24
64VCWF	1403	64	ES	T24	1505	68	ES	T24	1619	74	ES	T24	1794	82	ES	T24
64VDFW	1333	64	ES	T24	1437	69	ES	T24	1542	74	ES	T24	1724	83	ES	T24
64VG	1405	64	ES	T24	1507	68	ES	T24	1621	74	ES	T24	1796	82	ES	T24
64VGWF	1388	63	ES	T24	1489	68	ES	T24	1602	73	ES	T24	1775	81	ES	T24
64VH	1376	63	ES	T24	1475	67	ES	T24	1587	72	ES	T24	1759	80	ES	T24
64VHWF	1369	62	ES	T24	1468	67	ES	T24	1579	72	ES	T24	1750	80	ES	T24
64VW	1429	65	ES	T24	1532	70	ES	T24	1648	75	ES	T24	1827	83	ES	T24

3000 LUMEN

80 CRI																
Catalog #	PD630D010- PDM6A827				PD630D010- PDM6A830				PD630D010- PDM6A835				PD630D010- PDM6A840			
	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24
64VC	2772	78	ES	T24	2979	83	ES	T24	3161	89	ES	T24	3189	89	ES	T24
64VCWF	2721	76	ES	T24	2924	82	ES	T24	3103	87	ES	T24	3129	88	ES	T24
64VDFW	2573	72	ES	T24	2782	78	ES	T24	2944	82	ES	T24	2956	83	ES	T24
64VG	2724	76	ES	T24	2928	82	ES	T24	3107	87	ES	T24	3134	88	ES	T24
64VGWF	2692	75	ES	T24	2893	81	ES	T24	3070	86	ES	T24	3096	87	ES	T24
64VH	2667	75	ES	T24	2867	80	ES	T24	3042	85	ES	T24	3068	86	ES	T24
64VHWF	2654	74	ES	T24	2852	80	ES	T24	3027	85	ES	T24	3053	86	ES	T24
64VW	2770	78	ES	T24	2977	83	ES	T24	3159	88	ES	T24	3186	89	ES	T24

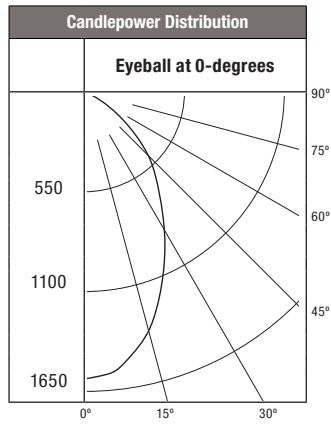
90 CRI																
Catalog #	PD630D010- PDM6A927				PD630D010- PDM6A930				PD630D010- PDM6A935				PD630D010- PDM6A940			
	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24	LUMENS	LPW	ES	T24
64VC	2136	60	ES	T24	2291	64	ES	T24	2464	69	ES	T24	2731	77	ES	T24
64VCWF	2097	59	ES	T24	2249	63	ES	T24	2419	68	ES	T24	2681	75	ES	T24
64VDFW	1967	55	ES	T24	2121	59	ES	T24	2275	64	ES	T24	2545	71	ES	T24
64VG	2100	59	ES	T24	2252	63	ES	T24	2422	68	ES	T24	2684	75	ES	T24
64VGWF	2075	58	ES	T24	2225	62	ES	T24	2393	67	ES	T24	2652	74	ES	T24
64VH	2056	58	ES	T24	2204	62	ES	T24	2371	66	ES	T24	2628	74	ES	T24
64VHWF	2045	57	ES	T24	2193	61	ES	T24	2359	66	ES	T24	2615	73	ES	T24
64VW	2135	60	ES	T24	2290	64	ES	T24	2463	69	ES	T24	2729	76	ES	T24

ES ES = ENERGY STAR® Compliant

T24 T24 = Can be used to comply with California Title 24 Non-Residential

PHOTOMETRY - 2000 lumen / 80 CRI / 64VC TRIM

PD620ED010-PDM6A835-64VC
Spacing Criteria = 0.92
Lumens per Watt = 96.2 Lm/W
Test No. P137453
Test Model: PD620ED010-PDM6A835-64VC



Candela Distribution	
Degrees Vertical	Candela
0*	1582
5	1558
10	1476
20	1203
30	879
40	608
50	364
60	131
70	10
80	0
90	0

*CBCP

Luminance	
(Average Candela/M ²)	
Degree	Avg. 0° Luminance
45	38469
55	22527
65	7355
75	0
85	0

Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5	52.3	5	5
7	32.3	6.4	6.4
8	24.7	7.2	7.2
9	19.5	8.2	8.2
10	15.8	9	9
12	11	10.8	10.8

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot. Footcandle values are initial, apply appropriate light loss factors where necessary.

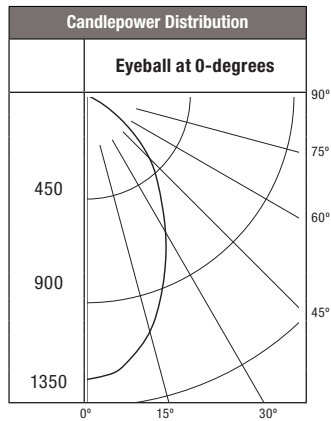
Zonal Lumen Summary		
Zone	Lumens	% Fixture
0-30	1003	47.4
0-40	1461	69.1
0-60	2053	97.1
0-90	2116	100

Scaling factor for the Battery back up:

- 1000 Lumen = 0.55
- 1500 Lumen = 0.40
- 2000 Lumen = 0.33
- 3000 Lumen = 0.22

PHOTOMETRY - 2000 lumen / 90 CRI / 64VC TRIM

PD620ED010-PDM6A935-64VC
Spacing Criteria = 0.92
Lumens per Watt = 75 Lm/W
Test No. P137457
Test Model: PD620ED010-PDM6A935-64VC



Candela Distribution	
Degrees Vertical	Candela
0*	1233
5	1215
10	1150
20	938
30	685
40	474
50	284
60	102
70	8
80	0
90	0

*CBCP

Luminance	
(Average Candela/M ²)	
Degree	Avg. 0° Luminance
45	29988
55	17567
65	5733
75	0
85	0

Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5	40.8	5	5
7	25.2	6.4	6.4
8	19.3	7.2	7.2
9	15.2	8.2	8.2
10	12.3	9	9
12	8.6	10.8	10.8

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot. Footcandle values are initial, apply appropriate light loss factors where necessary.

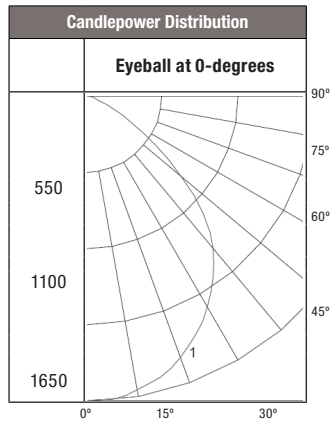
Zonal Lumen Summary		
Zone	Lumens	% Fixture
0-30	782	47.4
0-40	1139	69.1
0-60	1601	97.1
0-90	1649	100

Scaling factor for the Battery back up:

- 1000 Lumen = 0.55
- 1500 Lumen = 0.40
- 2000 Lumen = 0.33
- 3000 Lumen = 0.22

PHOTOMETRY - 2000 lumen / 80 CRI / 64VDFW TRIM

PD620ED010-PDM6A835-64VDFW
Spacing Criteria = 1.20
Lumens per Watt = 96 Lm/W
Test No. P189214
Test Model: PD620D010- PDM835-64VDFW



Candela Distribution	
Degrees Vertical	Candela
0*	974.5
5	972.5
10	952.8
20	888.5
30	779.5
40	635.2
50	401.6
60	171.3
70	54.2
80	24.4
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	41438
55	26192
65	12817
75	7449
85	8106

Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5	24.9	6.4	56.4
7	15.4	8.2	8.2
8	11.8	9.4	9.4
9	9.3	10.6	10.6
10	7.5	11.8	11.8
12	5.2	14.2	14.2

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot. Footcandle values are initial, apply appropriate light loss factors where necessary.

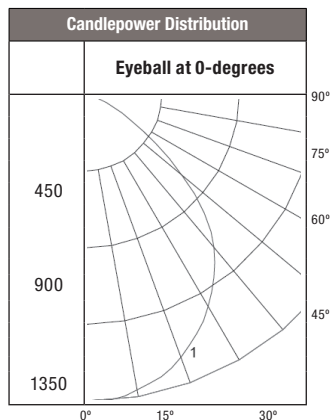
Zonal Lumen Summary		
Zone	Lumens	% Fixture
0-30	739.65	37.10
0-40	1183.69	59.40
0-60	1838.93	92.20
0-90	1993.89	100

Scaling factor for the Battery back up:

- 1000 Lumen = 0.55
- 1500 Lumen = 0.40
- 2000 Lumen = 0.33
- 3000 Lumen = 0.22

PHOTOMETRY - 2000 lumen / 90 CRI / 64VDFW TRIM

PD620ED010- PDM6A935-64VDFW
Spacing Criteria = 1.20
Lumens per Watt = 74 Lm/W
Test No. P189218
Test Model: PD620D010- PDM935-64VDFW



Candela Distribution	
Degrees Vertical	Candela
0*	753.5
5	752.0
10	736.8
20	687.0
30	602.7
40	491.2
50	310.5
60	132.5
70	41.9
80	18.9
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	32043
55	20253
65	9914
75	5756
85	6221

Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5	32.2	6.4	6.4
7	19.9	8.2	8.2
8	15.2	9.4	9.4
9	12	10.6	10.6
10	9.7	11.8	11.8
12	6.8	14.2	14.2

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot. Footcandle values are initial, apply appropriate light loss factors where necessary.

Zonal Lumen Summary		
Zone	Lumens	% Fixture
0-30	571.94	37.10
0-40	915.28	59.40
0-60	1421.94	92.20
0-90	1541.76	100

Scaling factor for the Battery back up:

- 1000 Lumen = 0.55
- 1500 Lumen = 0.40
- 2000 Lumen = 0.33
- 3000 Lumen = 0.22