

DESCRIPTION

The Halo PD6RX Retrofit Kit is designed to be installed into existing Halo Commercial PD6 Housings. Recessed 6-inch LED wall washer retrofit is available in various lumen and CRI/CCT options. Installs from below the ceiling into existing open frame recessed housings. Cutout type kicker reflector reduces scallops and provides vertical illumination.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

MECHANICAL

Frame

Use to retrofit existing Halo Commercial PD6 series incandescent, compact fluorescent or metal halide recessed housings to LED.

Eaton Halo Commercial

- PD6H Series
- PD6V Series
- PD6P Series

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.

Reflector

One piece parabolic aluminum reflector combines high optical efficiency with visual comfort. 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

Module Flex

Armored cable assembly attaches to junction box and provides tool-less connection to the LED module.

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 1% with 0 -10V analog control. Mounted to a junction box cover to replace existing.

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 Classified for wet location
- Non-IC rated for 2000 and 3000 Lumen fixtures. Insulation must be kept 3" from top and sides.
- IC rated for 1000 and 1500 Lumen fixtures.
- 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.
- 80 CRI: 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.



PD6RX10
PD6RX15
PD6RX20
PD6RX30

PDM6B

61WW

**1000, 1500,
2000 & 3000
Lumen Series**

LED RETROFIT

**6-Inch Aperture
Wall Washer**

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

Lumens	1000 Series	
Input Voltage	120V	277V
Input Current	0.083 A	0.041 A
Input Power	9.9 W	10.8 W
Efficacy	113 LPW	113 LPW
Inrush Current	0.53 A	1.3 A

Lumens	1500 Series	
Input Voltage	120V	277V
Input Current	0.114 A	0.053 A
Input Power	13.7 W	14.3 W
Efficacy	112 LPW	112 LPW
Inrush Current	0.63 A	1.7 A

Lumens	2000 Series	
Input Voltage	120V	277V
Input Current	0.166 A	0.079 A
Input Power	19.9 W	20.5 W
Efficacy	109 LPW	109 LPW
Inrush Current	0.59 A	2.7 A

Lumens	3000 Series	
Input Voltage	120V	277V
Input Current	0.232 A	0.103 A
Input Power	27.7 W	27.5 W
Efficacy	103 LPW	103 LPW
Inrush Current	0.73 A	2.9 A

ORDERING INFORMATION

SAMPLE NUMBER: PD6RX10D010BREM-PDM6B827-61WW

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

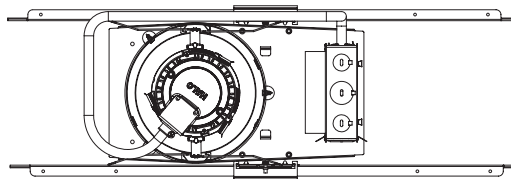
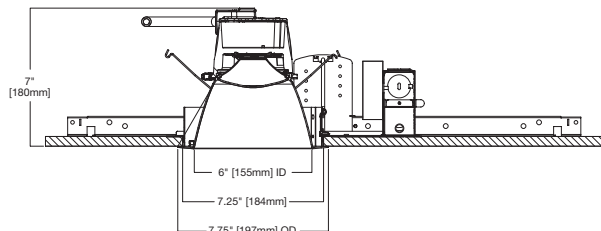
Housing	Lumens	Driver	Options	LED Module	CRI/CCT
PD6RX = 6" aperture LED downlight retrofit, less mounting frame PD6RXCP = 6" aperture LED downlight retrofit, less mounting frame, CCEA listed for City of Chicago plenum requirements	10 = 1,000 lumens (nominal) 15 = 1,500 lumens (nominal) 20 = 2,000 lumens (nominal) 30 = 3,000 lumens (nominal)	D010B = 120-277V 50/60Hz, 0-10V dimming	REM =Emergency operation with remote indicator and test switch (not available with PD6RXCP housing), 60Hz	PDM6B = 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

Reflector	Finish Option	Flange Option	Accessories
61WW = 6" single wall wash	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, BB, & WB WF = White flange option available with C, G, & H reflector finishes	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) TMSWPD1 = WaveLinX tilemount daylight sensor (includes control module, sensor, cable and tile mount)

UL Listed into Halo Commercial Housings:

- Use to retrofit existing Halo Commercial PD6 series incandescent, compact fluorescent or metal halide recessed housings to LED
- Use PDM6B LED Light Engine: PD610x, PD620x, and PD630X
- Designed to work with Halo Commercial LED trim series: 61Vx, 64Vx, and 61WWx

DIMENSIONS



COMPLIANCE TABLE

1000 LUMEN

80 CRI								
Catalog #	PD6RX10D010B-PDM6B827		PD6RX10D010B-PDM6B830		PD6RX10D010B-PDM6B835		PD6RX10D010B-PDM6B840	
	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
61WWC	1053	106	1117	113	1147	116	1168	118
61WWCW	1064	107	1128	114	1158	117	1180	119
61WWG	1049	106	1112	112	1142	115	1163	118
61WWGW	1038	105	1101	111	1131	114	1152	116
61WWH	1019	103	1080	109	1109	112	1130	114
61WWHW	1022	103	1084	109	1113	112	1134	115
61WWW	1038	105	1101	111	1131	114	1152	116

90 CRI								
Catalog #	PD6RX10D010B-PDM6B927		PD6RX10D010B-PDM6B930		PD6RX10D010B-PDM6B935		PD6RX10D010B-PDM6B940	
	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
61WWC	899	91	950	96	1006	102	1021	103
61WWCW	908	92	960	97	1016	103	1032	104
61WWG	895	90	946	96	1002	101	1017	103
61WWGW	886	89	937	95	992	100	1007	102
61WWH	869	88	919	93	973	98	988	100
61WWHW	872	88	922	93	976	99	991	100
61WWW	886	89	937	95	992	100	1007	102

1500 LUMEN

80 CRI								
Catalog #	PD6RX15D010B-PDM6B827		PD6RX15D010B-PDM6B830		PD6RX15D010B-PDM6B835		PD6RX15D010B-PDM6B840	
	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
61WWC	1430	104	1516	111	1557	114	1586	116
61WWCW	1444	105	1532	112	1573	115	1602	117
61WWG	1424	104	1510	110	1550	113	1579	115
61WWGW	1410	103	1495	109	1535	112	1564	114
61WWH	1383	101	1467	107	1506	110	1534	112
61WWHW	1387	101	1471	107	1511	110	1539	112
61WWW	1410	103	1495	109	1535	112	1564	114

90 CRI								
Catalog #	PD6RX15D010B-PDM6B927		PD6RX15D010B-PDM6B930		PD6RX15D010B-PDM6B935		PD6RX15D010B-PDM6B940	
	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
61WWC	1220	89	1290	94	1365	100	1386	101
61WWCW	1233	90	1303	95	1380	101	1401	102
61WWG	1215	89	1285	94	1360	99	1381	101
61WWGW	1203	88	1272	93	1346	98	1367	100
61WWH	1180	86	1248	91	1321	96	1341	98
61WWHW	1184	86	1252	91	1325	97	1345	98
61WWW	1203	88	1272	93	1346	98	1367	100

COMPLIANCE TABLE continued

2000 LUMEN

80 CRI								
Catalog #	PD6RX20D010B-PDM6B827		PD6RX20D010B-PDM6B830		PD6RX20D010B-PDM6B835		PD6RX20D010B-PDM6B840	
	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
61WWC	2024	102	2146	108	2204	111	2245	113
61WWCW	2045	103	2168	109	2227	112	2269	114
61WWG	2016	101	2137	107	2195	110	2236	112
61WWGW	1996	100	2116	106	2173	109	2214	111
61WWH	1958	98	2076	104	2132	107	2173	109
61WWHW	1964	99	2083	105	2139	107	2179	109
61WWW	1996	100	2116	106	2173	109	2214	111

90 CRI								
Catalog #	PD6RX20D010B-PDM6B927		PD6RX20D010B-PDM6B930		PD6RX20D010B-PDM6B935		PD6RX20D010B-PDM6B940	
	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
61WWC	1727	87	1826	92	1933	97	1963	99
61WWCW	1745	88	1845	93	1953	98	1983	100
61WWG	1720	86	1819	91	1925	97	1955	98
61WWGW	1703	86	1801	90	1906	96	1935	97
61WWH	1671	84	1767	89	1871	94	1899	95
61WWHW	1676	84	1772	89	1876	94	1905	96
61WWW	1703	86	1801	90	1906	96	1935	97

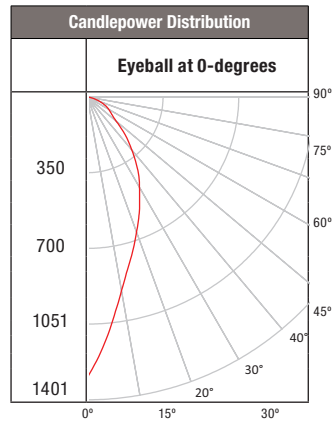
3000 LUMEN

80 CRI								
Catalog #	PD6RX30D010B-PDM6B827		PD6RX30D010B-PDM6B830		PD6RX30D010B-PDM6B835		PD6RX30D010B-PDM6B840	
	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
61WWC	2639	96	2798	102	2873	104	2927	106
61WWCW	2666	97	2827	103	2903	106	2958	108
61WWG	2628	96	2786	101	2861	104	2915	106
61WWGW	2602	95	2759	100	2833	103	2887	105
61WWH	2553	93	2707	98	2780	101	2832	103
61WWHW	2561	93	2715	99	2788	101	2841	103
61WWW	2602	95	2759	100	2833	103	2887	105

90 CRI								
Catalog #	PD6RX30D010B-PDM6B927		PD6RX30D010B-PDM6B930		PD6RX30D010B-PDM6B935		PD6RX30D010B-PDM6B940	
	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
61WWC	2252	82	2381	87	2520	92	2559	93
61WWCW	2275	83	2406	87	2547	93	2585	94
61WWG	2242	82	2371	86	2510	91	2548	93
61WWGW	2220	81	2348	85	2485	90	2523	92
61WWH	2179	79	2304	84	2439	89	2476	90
61WWHW	2185	79	2311	84	2446	89	2483	90
61WWW	2220	81	2348	85	2485	90	2523	92

PHOTOMETRY - 1000 lumen / 80 CRI

PD6RX10D010B-PDM6B835-61WWC Spacing Criteria = 0.78 Lumens per Watt = 115.8 Lm/W Test No. P215592 Test Model: PD6RX10D010B-PDM6B835-61WWC
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Candela Distribution	
Degrees Vertical	Candela
0*	1298
5	1102
15	775
25	571
35	404
45	248
55	136
65	90
75	34
85	4
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	19196
55	13008
65	11713
75	7307
85	2516

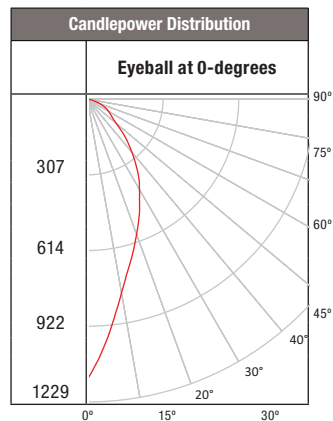
Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	46.1	3.7	4.2
7'	28.5	4.7	5.4
8'	21.8	5.5	6.2
9'	17.2	6.2	7
10'	13.9	6.8	7.8
12'	9.7	8.3	9.4

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	726	63.3
0-40	952	83
0-60	1097	95.7
0-90	1147	100

PHOTOMETRY - 1000 lumen / 90 CRI

PD6RX10D010B-PDM6B935-61WWC Spacing Criteria = 0.78 Lumens per Watt = 101.6 Lm/W Test No. P215596 Test Model: PD6RX10D010B-PDM6B935-61WWC
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Candela Distribution	
Degrees Vertical	Candela
0*	1139
5	967
10	789
20	584
30	423
40	281
50	153
60	100
70	55
80	13
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	16839
55	11412
65	10273
75	6418
85	2201

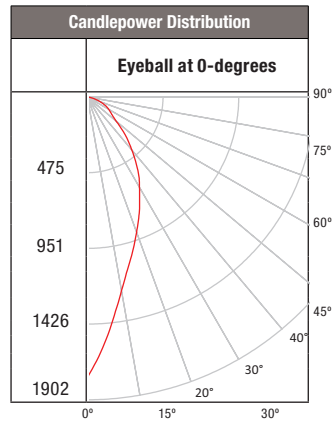
Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	28	5	5
7'	17.3	6.4	6.4
8'	13.2	7.4	7.4
9'	10.5	8.4	8.4
10'	8.5	9.4	9.4
12'	5.9	11.2	11.2

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	637	63.3
0-40	835	83
0-60	962	95.7
0-90	1006	100

PHOTOMETRY - 1500 lumen / 80 CRI

PD6RX15D010B-PDM6B835-61WWC
Spacing Criteria = 0.78
Lumens per Watt = 113.6 Lm/W
Test No. P215576
Test Model: PD6RX15D010B-PDM6B835-61WWC



Candela Distribution	
Degrees Vertical	Candela
0*	1762
5	1496
15	1052
25	775
35	549
45	336
55	185
65	123
75	47
85	5
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	26065
55	17662
65	15903
75	9934
85	3397

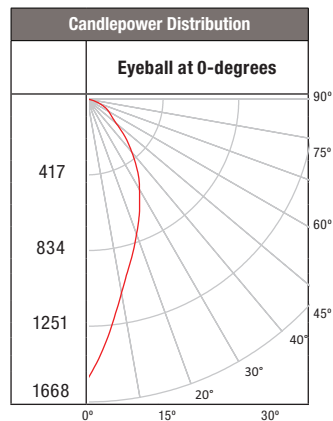
Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	62.6	3.7	4.2
7'	38.6	4.7	5.4
8'	29.6	5.5	6.2
9'	23.4	6.2	7
10'	18.9	6.8	7.8
12'	13.1	8.3	9.4

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	986	63.3
0-40	1292	83
0-60	1489	95.7
0-90	1556	100

PHOTOMETRY - 1500 lumen / 90 CRI

PD6RX15D010B-PDM6B935-61WWC
Spacing Criteria = 0.78
Lumens per Watt = 99.7 Lm/W
Test No. P215580
Test Model: PD6RX15D010B-PDM6B935-61WWC



Candela Distribution	
Degrees Vertical	Candela
0*	1546
5	1312
15	923
25	680
35	482
45	295
55	162
65	108
75	41
85	5
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	22863
55	15493
65	13944
75	8705
85	2956

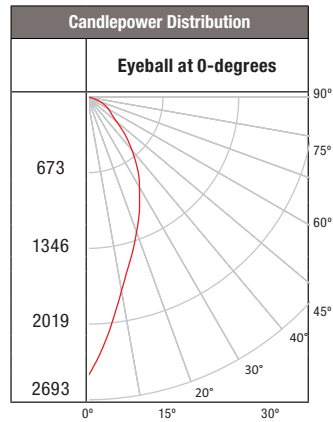
Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	54.9	3.7	4.2
7'	33.9	4.7	5.4
8'	26	5.5	6.2
9'	20.5	6.2	7
10'	16.6	6.8	7.8
12'	11.5	8.3	9.4

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	865	63.3
0-40	1134	83
0-60	1307	95.7
0-90	1365	100

PHOTOMETRY - 2000 lumen / 80 CRI

PD6RX20D010B-PDM6B835-61VC
Spacing Criteria = 0.72
Lumens per Watt = 115.9 Lm/W
Test No. P215304
Test Model: PD6RX20D010B-PDM6B835-61VC



Candela Distribution	
Degrees Vertical	Candela
0*	3477
5	3343
15	2543
25	1637
35	683
45	112
55	10
65	3
75	1
85	0
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	8706
55	975
65	337
75	275
85	0

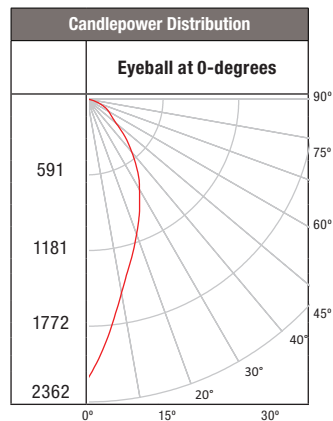
Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	88.6	3.7	4.2
7'	54.7	4.7	5.4
8'	41.9	5.5	6.2
9'	33.1	6.2	7
10'	26.8	6.8	7.8
12'	18.6	8.3	9.4

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	1756.7	76.1
0-40	2189.2	94.9
0-60	2302.9	99.8
0-90	2307.1	100

PHOTOMETRY - 2000 lumen / 90 CRI

PD6RX20D010B-PDM6B935-61WWC
Spacing Criteria = 0.78
Lumens per Watt = 97.1 Lm/W
Test No. P215564
Test Model: PD6RX20D010B-PDM6B935-61WWC



Candela Distribution	
Degrees Vertical	Candela
0*	2188
5	1858
15	1306
25	963
35	682
45	418
55	230
65	152
75	58
85	7
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	32368
55	21935
65	19743
75	12327
85	4214

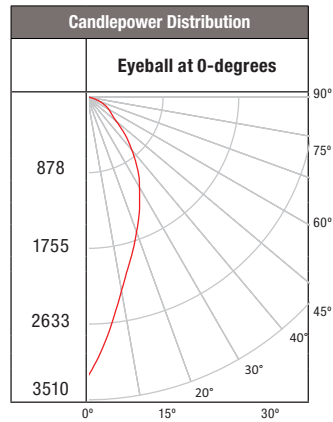
Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	77.7	3.7	4.2
7'	48	4.7	5.4
8'	36.7	5.5	6.2
9'	29	6.2	7
10'	23.5	6.8	7.8
12'	16.3	8.3	9.4

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	1225	63.3
0-40	1605	83
0-60	1850	95.7
0-90	1933	100

PHOTOMETRY - 3000 lumen / 80 CRI

PD6RX30D010B-PDM6B835-61WWC
Spacing Criteria = 0.78
Lumens per Watt = 104.5 Lm/W
Test No. P215608
Test Model: PD6RX30D010B-PDM6B835-61WWC



Candela Distribution	
Degrees Vertical	Candela
0*	3252
5	2762
15	1941
25	1431
35	1013
45	620
55	341
65	226
75	86
85	10
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	48106
55	32591
65	29355
75	18321
85	6290

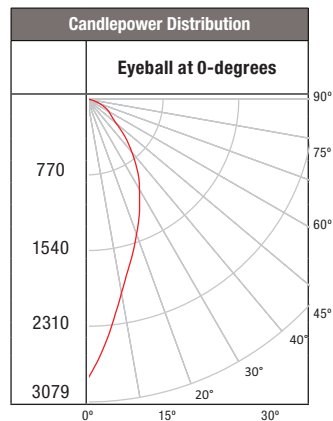
Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	115.5	3.7	4.2
7'	71.3	4.7	5.4
8'	54.6	5.5	6.2
9'	43.1	6.2	7
10'	34.9	6.8	7.8
12'	24.3	8.3	9.4

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	1820	63.3
0-40	2385	83
0-60	2749	95.7
0-90	2873	100

PHOTOMETRY - 3000 lumen / 90 CRI

PD6RX30D010B-PDM6B935-61VC
Spacing Criteria = 0.78
Lumens per Watt = 91.6 Lm/W
Test No. P215612
Test Model: PD6RX30D010B-PDM6B935-61VC



Candela Distribution	
Degrees Vertical	Candela
0*	2853
5	2423
10	1999
20	1462
30	1060
40	703
50	382
60	251
70	137
80	32
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	42206
55	28596
65	25749
75	16076
85	5535

Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	101.4	3.7	4.2
7'	62.6	4.7	5.4
8'	47.9	5.5	6.2
9'	37.9	6.2	7
10'	30.7	6.8	7.8
12'	21.3	8.3	9.4

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	1596	63.3
0-40	2093	83
0-60	2412	95.7
0-90	2520	100