

REPORT NUMBER: ITL77370

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ISSUE DATE: 06/04/13

PREPARED FOR: PACE ELECTRONIC PRODUCTS

CATALOG NUMBER: PAC0545W-L

LUMINAIRE: MOLDED WHITE PLASTIC EXTERIOR HOUSING, MOLDED WHITE PLASTIC INTERIOR HOUSING, TWO MOLDED WHITE PLASTIC SWIVEL HEAD ASSEMBLIES, EACH HEAD ASSEMBLY CONSISTS OF: ONE CIRCUIT BOARD WITH 12 LEDS, PLASTIC REFLECTOR WITH SPECULAR FINISH AND ONE APERTURE PER LED, FROSTED PLASTIC LENS, LENS FROSTED SIDE IN. CLEAR PLASTIC EXTERIOR LENS WITH LINEAR PRISMATIC FORWARD CENTER SECTION, LENS PRISMS IN AND PARALLEL WITH LENGTH OF HOUSING. EXACT INTERIOR PROPERTIES UNKNOWN AS HEAD ASSEMBLY NOT DISASSEMBLED FOR INSPECTION. ONLY ONE HEAD ASSEMBLY ENERGIZED FOR THIS TEST.

LAMPS: TWELVE WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.

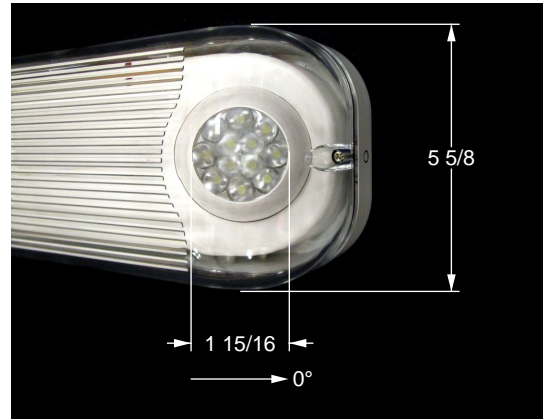
TOTAL INPUT WATTS = 1.15 AT 3.6 VOLTS DC

MOUNTING: WALL

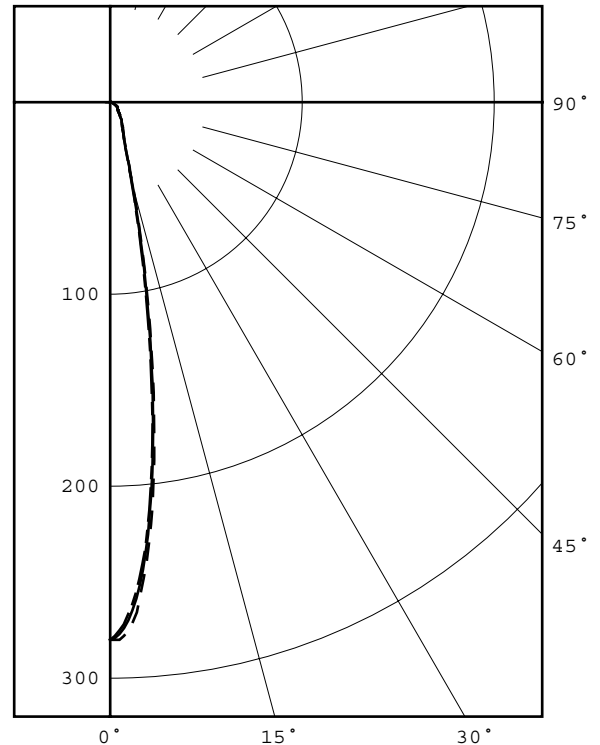
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT CUSTOMER REQUESTED INPUT VOLTAGE (3.6VDC) TO THE LAMP. THE SWIVEL HEAD ASSEMBLY WAS SET IN A CLIENT REQUESTED POSITION WHICH IS APPROXIMATELY AIMED AT THE HORIZON AND CANTED 28-DEGREES FROM STRAIGHT AHEAD WHEN LUMINAIRE IS IN THE VERTICAL AND LEVEL POSITION. FOR THIS TEST THE LUMINAIRE WAS POSITIONED TO PLACE THE LEDS IN THE VERTICAL BASE-UP POSITION (AIMED TOWARDS NADIR).

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET



CANDELA DISTRIBUTION						FLUX
	0.0	45.0	90.0	135.0	180.0	
0	280	280	280	280	280	18.0
5	231	232	226	223	223	13.8
15	46	47	45	44	43	7.2
25	15	16	15	15	16	6.0
35	9	9	9	9	9	4.6
45	6	6	6	6	6	4.1
55	4	4	5	4	4	2.9
65	2	3	2	3	3	1.2
75	1	1	1	1	1	0.1
85	0	0	0	0	0	0.0
90	0	0	0	0	0	0.0
95	0	0	0	0	0	0.0
105	0	0	0	0	0	0.0
115	0	0	0	0	0	0.0
125	0	0	1	0	0	0.1
135	0	0	0	0	0	0.0
145	0	0	0	0	0	0.0
155	0	0	0	0	0	0.0
165	0	0	0	0	0	0.0
175	0	0	0	0	0	0.0
180	0	0	0	0	0	0.0



LEGEND:
0-deg -----
90-deg =====
180-deg -----

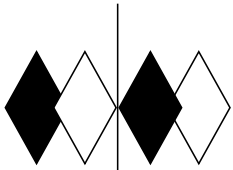
ZONAL ZONE	LUMEN LUMENS	SUMMARY LUMENS	%FIXT
0- 30		38.9	67.2
0- 40		45.0	77.6
0- 60		53.6	92.6
0- 90		57.9	99.8
90-120		0.0	0.0
90-130		0.1	0.2
90-150		0.1	0.2
90-180		0.1	0.2
0-180		58.0	100.0

EFFICACY = 50.4 lm/W

CIE TYPE - DIRECT

PLANE	0-DEG	90-DEG	180-DEG
SPACING CRITERIA	0.31	0.30	0.30
BEAM ANGLE (50%)	17.8 X	17.8 DEGREES	
FIELD ANGLE (10%)	35.8 X	35.6 DEGREES	

Checked B. HYRE
Approved R. BEATTIE
Lighting Engineer



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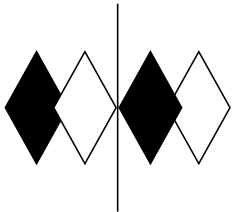
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CANDELA DISTRIBUTION
 LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0.0	280	280	280	280	280	280	280	280	280
0.5	280	280	280	279	279	279	278	279	278
1.0	280	279	279	278	277	277	276	276	275
1.5	278	277	276	275	274	274	272	274	272
2.0	275	274	273	272	270	269	268	269	267
2.5	271	270	269	267	265	264	263	264	262
3.0	266	264	263	261	259	258	256	259	256
3.5	257	258	257	254	252	251	249	252	249
4.0	249	250	249	247	244	243	241	244	241
4.5	241	242	241	238	235	234	233	236	233
5.0	231	233	232	230	226	225	223	226	223
5.5	221	223	222	220	215	212	213	216	213
6.0	211	212	212	209	205	201	202	206	202
6.5	199	201	201	199	194	190	191	195	191
7.0	188	190	189	188	182	179	179	184	180
7.5	176	179	178	176	171	167	168	172	169
8.0	164	167	166	165	160	156	157	161	157
8.5	153	156	155	153	149	145	145	146	145
9.0	141	144	143	142	137	134	134	135	134
9.5	130	133	132	132	127	123	124	125	123
10.0	120	123	122	121	116	113	113	114	112
11.0	100	102	101	101	97	94	94	95	93
12.0	83	85	84	83	80	78	78	78	77
13.0	68	70	69	68	66	65	65	65	63
14.0	56	58	56	56	54	53	53	52	52
15.0	46	48	47	46	45	44	44	43	43
16.0	38	40	39	38	37	37	37	37	37
17.0	33	33	33	32	32	31	32	31	31
18.0	28	29	29	28	27	27	28	27	27
19.0	25	25	25	24	24	24	25	24	24
20.0	22	22	22	21	22	21	22	21	22
22.5	18	18	18	17	18	17	18	17	18
25.0	15	15	16	15	15	15	15	15	16
27.5	13	14	14	13	13	13	13	14	14
30.0	12	12	12	12	12	12	12	12	12
32.5	10	11	11	11	11	11	11	11	11
35.0	9	10	9	10	9	10	9	10	9
37.5	8	9	8	9	8	9	8	9	8
40.0	7	8	7	8	7	8	7	8	7
42.5	6	7	6	7	6	7	6	7	6
45.0	6	6	6	6	6	6	6	6	6
47.5	5	5	5	5	5	5	5	5	5
50.0	5	5	5	5	5	5	5	5	5
52.5	5	5	5	5	5	5	5	5	5
55.0	4	4	4	5	5	5	4	5	4
57.5	4	4	4	5	4	5	4	5	4
60.0	3	4	4	4	4	4	4	4	4
62.5	3	4	3	4	3	4	3	4	3
65.0	2	3	3	3	2	3	3	3	3
67.5	2	3	2	3	2	2	2	3	2
70.0	2	2	2	2	2	2	2	2	2
72.5	1	2	1	1	1	1	1	2	2
75.0	1	1	1	1	1	1	1	1	1
77.5	1	1	1	1	1	1	1	1	1
80.0	1	1	0	1	1	1	0	1	1
82.5	0	0	0	0	0	0	0	0	0
85.0	0	0	0	0	0	0	0	0	0
87.5	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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CANDELA DISTRIBUTION
 LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
105.0	0	0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0	0	0
110.0	0	0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	1	0	0	0	0
125.0	0	0	0	0	1	0	0	0	0
130.0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	6.1
5- 10	11.9
10- 15	8.8
15- 20	5.0
20- 25	3.8
25- 30	3.4
30- 35	3.2
35- 40	2.8
40- 45	2.5
45- 50	2.1
50- 55	2.1
55- 60	2.0
60- 65	1.7
65- 70	1.2
70- 75	0.7
75- 80	0.5
80- 85	0.1
85- 90	0.0
90- 95	0.0
95-100	0.0
100-105	0.0
105-110	0.0
110-115	0.0
115-120	0.0
120-125	0.1
125-130	0.0
130-135	0.0
135-140	0.0
140-145	0.0
145-150	0.0
150-155	0.0
155-160	0.0
160-165	0.0
165-170	0.0
170-175	0.0
175-180	0.0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	18.0
0- 20	31.8
0- 30	38.9
0- 40	45.0
0- 50	49.5
0- 60	53.6
0- 70	56.5
0- 80	57.8
0- 90	57.9
0-100	57.9
0-110	57.9
0-120	57.9
0-130	58.0
0-140	58.0
0-150	58.0
0-160	58.0
0-170	58.0
0-180	58.0



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85
3	102	95	90	86	100	93	89	85	91	87	83	88	85	82	86	83	81	79
4	97	89	83	79	95	88	83	79	86	81	78	84	80	77	82	78	76	74
5	92	84	78	74	91	83	78	74	81	77	73	80	75	72	78	74	72	70
6	88	80	74	70	87	79	73	70	77	73	69	76	72	69	75	71	68	67
7	85	76	70	66	84	75	70	66	74	69	66	73	69	65	72	68	65	64
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	62	61
9	79	70	65	61	78	70	64	61	69	64	61	68	63	60	67	63	60	59
10	76	67	62	59	75	67	62	59	66	62	58	66	61	58	65	61	58	57

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

NOTE: THE ZONAL CAVITY CALCULATION TECHNIQUE IS ACCURATE WHEN LUMINAIRES WITH SYMMETRIC CANDELA DISTRIBUTIONS ARE EMPLOYED AND WHEN THE LUMINAIRES ARE LOCATED SYMMETRICALLY THROUGHOUT THE ROOM. THIS UNIT HAS SPECIAL CHARACTERISTICS AND THEREFORE THESE COEFFICIENTS SHOULD BE USED WITH CAUTION.

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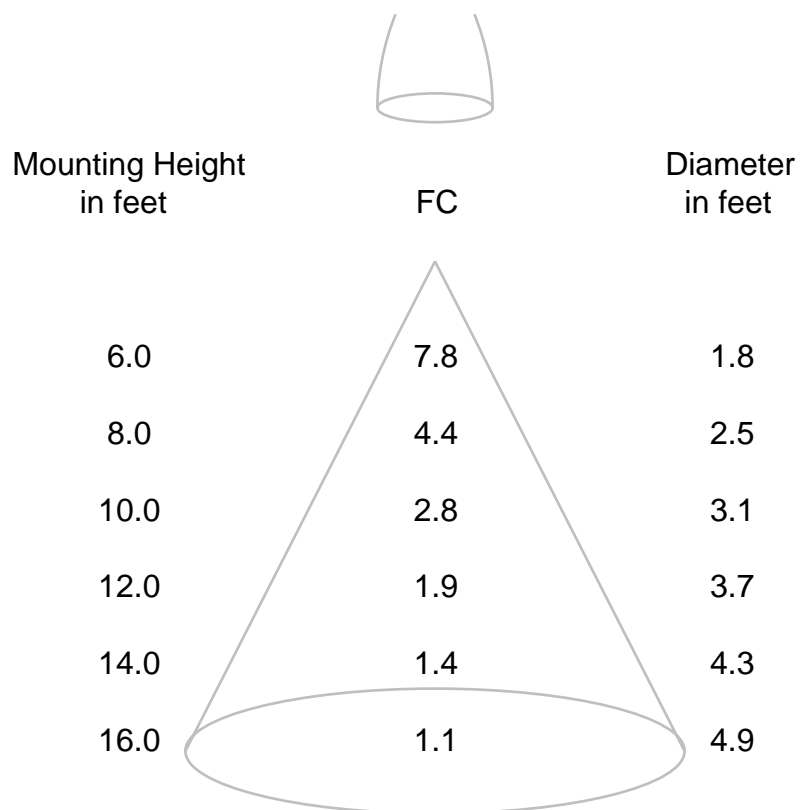
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CONE OF LIGHT DIAGRAM

(diameter shown is where fc value is half the fc at nadir)



Note: The candela values used to generate this diagram were obtained by averaging the photometric data into a single plane.



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