

REPORT NUMBER: ITL94773-GONIOPHOTOMETRY

PAGE: 1 OF 6

ISSUE DATE: 05/24/21

PREPARED FOR: PACE ELECTRONICS

ADDRESS: 34 FOLEY DRIVE
SODUS, NY 14551

CATALOG NUMBER: PAC0839

LUMINAIRE: MOLDED WHITE PLASTIC HOUSING WITH TWO MOLDED WHITE PLASTIC SWIVEL HEAD ASSEMBLIES, EACH HEAD ASSEMBLY CONSISTS OF: UNKNOWN NUMBER OF LEDS, TRANSLUCENT WHITE TEXTURED PLASTIC LENS, MOLDED WHITE PLASTIC LENS FRAME. BOTH SWIVEL HEAD ASSEMBLIES WERE ILLUMINATED FOR THIS TEST. ONLY ONE LIGHT HEAD WAS MEASURED FOR LIGHT OUTPUT.

LAMP: UNKNOWN NUMBER AND TYPE OF LIGHT EMITTING DIODES (LEDS), UNKNOWN POSITION.

MOUNTING: SURFACE

LED DRIVER: PACE ELECTRONICS PROPRIETARY

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT CLIENT REQUESTED INPUT VOLTAGE (3.6VDC) TO THE DRIVER. DRIVER INFORMATION PROVIDED BY CLIENT.

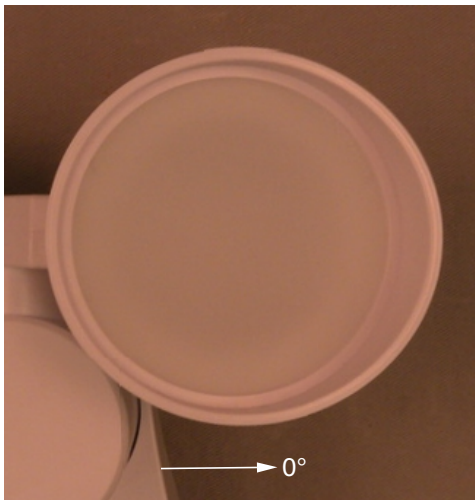
NOTE 2: THIS PHOTOMETRIC REPORT REPRESENTS A SINGLE LIGHT HEAD CONTAINING 2 LEDS WITH THE DRIVER OPERATED AT 3.6VDC TO THE BATTERY INPUT. IN ORDER TO DETERMINE EFFICACY, THE INPUT WATTAGE TO THE DRIVER OPERATING BOTH LIGHT HEADS WAS DIVIDED BY 2 TO REPRESENT A SINGLE LIGHT HEAD INPUT WATTAGE. THE SYSTEM EFFICACY WAS THEN CALCULATED BY DIVIDING THE LUMENS OF A SINGLE LIGHT HEAD BY THE CALCULATED INPUT WATTAGE FOR A SINGLE LIGHT HEAD.

INPUT ELECTRICAL: 3.60 VOLTS, 2.758 WATTS, 0.766 AMPS

TEST PROCEDURE: IESNA LM-79-19

TEST DISTANCE = 20.0 FEET

AMBIENT: 24.5



THIS REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THE CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.

Approved R BERGIN

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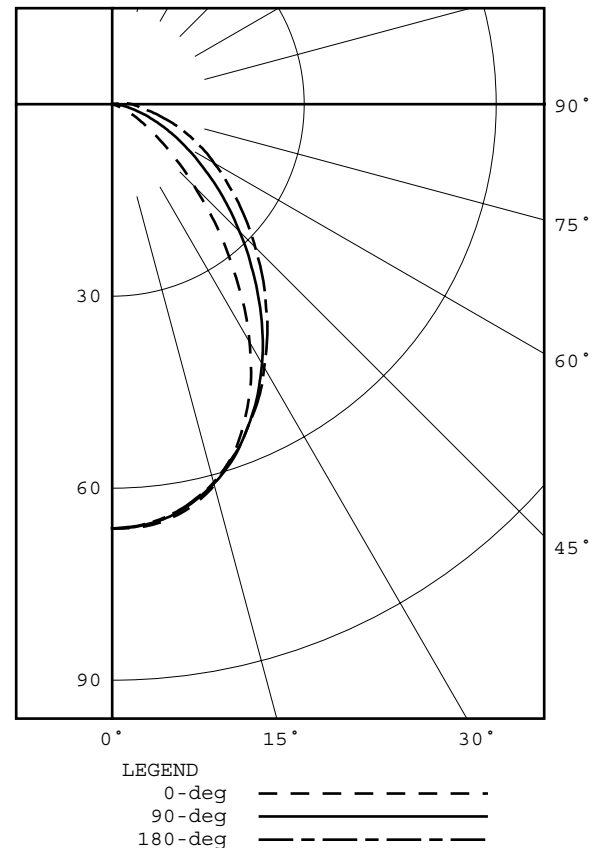
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CANDELA DISTRIBUTION						FLUX
	0.0	45.0	90.0	135.0	180.0	
0	66.3	66.3	66.3	66.3	66.3	
5	66.1	66.0	65.8	65.7	65.7	6
15	61.6	61.5	61.4	61.2	61.2	17
25	50.6	51.4	52.5	52.7	52.7	24
35	34.2	36.9	40.6	42.0	42.3	25
45	18.2	22.2	28.1	31.1	31.6	21
55	7.8	11.0	17.5	21.5	22.3	15
65	2.6	4.5	9.5	13.7	14.9	9
75	0.1	1.0	3.9	7.3	8.3	5
85	0.0	0.0	1.0	3.2	4.1	2
90	0.0	0.0	0.0	2.2	3.1	
95	0.0	0.0	0.0	1.0	1.4	1
105	0.0	0.0	0.0	0.0	0.0	0
115	0.0	0.0	0.0	0.0	0.0	0
125	0.0	0.0	0.0	0.0	0.0	0
135	0.0	0.0	0.0	0.0	0.0	0
145	0.0	0.0	0.0	0.0	0.0	0
155	0.0	0.0	0.0	0.0	0.0	0
165	0.0	0.0	0.0	0.0	0.0	0
175	0.0	0.0	0.0	0.0	0.0	0
180	0.0	0.0	0.0	0.0	0.0	0

ZONAL LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	47	38.4
0- 40	72	58.4
0- 60	107	87.1
0- 90	123	99.6
90-120	1	0.4
90-130	1	0.4
90-150	1	0.4
90-180	1	0.4
0-180	123	100.0

EFFICACY = 89.2 lm/W (SEE NOTE 2)
 CIE TYPE - DIRECT PLANE : 0-DEG 90-DEG 180-DEG
 SPACING CRITERIA : 1.03 1.08 1.09
 BEAM ANGLE (50%) : 79.1 X 81.8 DEGREES
 FIELD ANGLE (10%) : 135.0 X 139.2 DEGREES





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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	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
5.0	66.1	66.0	66.0	65.9	65.8	65.8	65.7	65.7	65.7
10.0	64.6	64.6	64.5	64.3	64.2	64.0	64.0	63.9	64.0
15.0	61.6	61.6	61.5	61.5	61.4	61.2	61.2	61.1	61.2
20.0	56.9	57.0	57.2	57.3	57.5	57.4	57.3	57.3	57.4
25.0	50.6	50.8	51.4	52.0	52.5	52.7	52.7	52.7	52.7
30.0	42.9	43.3	44.5	45.7	46.8	47.3	47.5	47.5	47.5
35.0	34.2	35.3	36.9	39.0	40.6	41.5	42.0	42.1	42.3
40.0	26.0	26.9	29.4	32.1	34.2	35.7	36.6	36.8	36.9
45.0	18.2	19.5	22.2	25.5	28.1	30.1	31.1	31.5	31.6
50.0	12.3	13.2	16.0	19.4	22.6	24.7	26.1	26.6	26.8
55.0	7.8	8.6	11.0	14.2	17.5	20.0	21.5	22.2	22.3
60.0	4.8	5.4	7.3	10.1	13.2	15.6	17.4	18.2	18.4
65.0	2.6	3.1	4.5	6.7	9.5	11.9	13.7	14.6	14.9
70.0	1.1	1.4	2.5	4.2	6.4	8.6	10.3	11.2	11.5
75.0	0.1	0.4	1.0	2.3	3.9	5.9	7.3	8.1	8.3
80.0	0.0	0.0	0.3	0.9	2.2	3.7	4.8	5.5	5.7
85.0	0.0	0.0	0.0	0.1	1.0	2.3	3.2	3.9	4.1
90.0	0.0	0.0	0.0	0.0	0.0	1.3	2.2	2.8	3.1
95.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.3	1.4
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0
105.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



INDEPENDENT TESTING LABORATORIES, INC.
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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	2
5- 10	5
10- 15	7
15- 20	10
20- 25	11
25- 30	12
30- 35	13
35- 40	12
40- 45	11
45- 50	10
50- 55	8
55- 60	7
60- 65	5
65- 70	4
70- 75	3
75- 80	2
80- 85	1
85- 90	1
90- 95	0
95-100	0
100-105	0
105-110	0
110-115	0
115-120	0
120-125	0
125-130	0
130-135	0
135-140	0
140-145	0
145-150	0
150-155	0
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	6
0- 20	23
0- 30	47
0- 40	72
0- 50	93
0- 60	107
0- 70	116
0- 80	121
0- 90	123
0-100	123
0-110	123
0-120	123
0-130	123
0-140	123
0-150	123
0-160	123
0-170	123
0-180	123



NVLAP LAB CODE: 200925-0

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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	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	101	97	100	97	94	96	93	91	92	90	89	87	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51	51
6	75	63	55	49	73	62	55	49	60	54	49	59	53	48	57	52	48	46	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	47	43	41	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	43	39	38	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34	34
10	58	46	39	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31	31

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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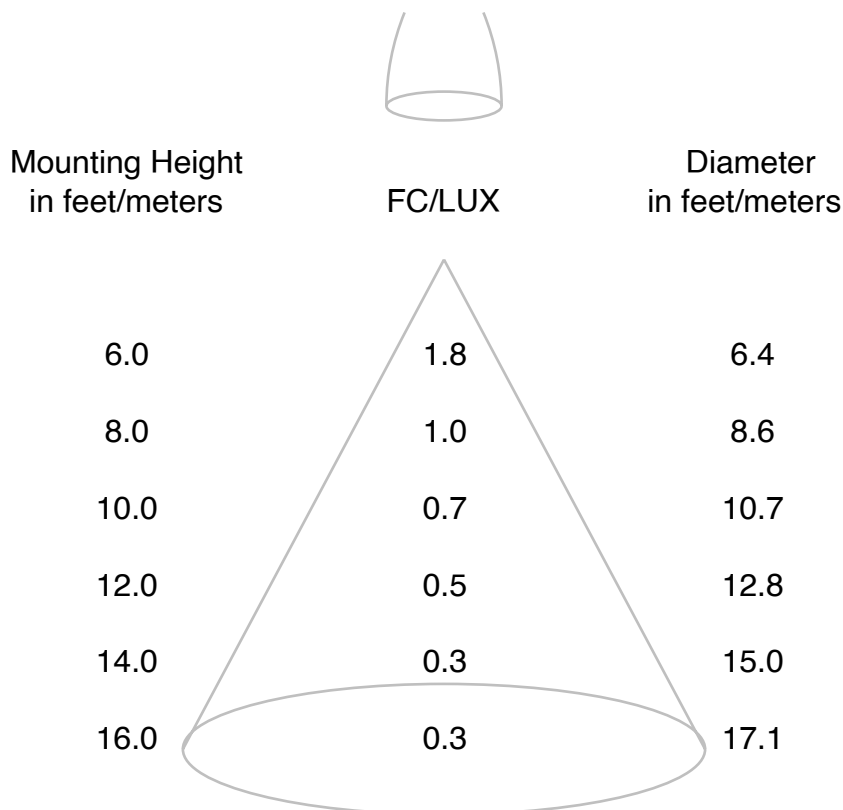
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CONE OF LIGHT DIAGRAM

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



If distances are feet, results are footcandles.

If distances are meters, results are lux.

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