

REPORT NUMBER: ITL89344-GONIOPHOTOMETRY
ISSUE DATE: 06/14/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
ADDRESS: 34 FOLEY DRIVE
 SODUS, NY 14551
CATALOG NUMBER: PAC0435WH-U-W

PAGE: 1 OF 6

LUMINAIRE: MOLDED WHITE PLASTIC EXTERIOR HOUSING, MOLDED WHITE PLASTIC INTERIOR HOUSING WITH 2 MOLDED WHITE PLASTIC SWIVEL HEAD ASSEMBLIES, EACH HEAD ASSEMBLY CONSISTS OF: ONE CIRCUIT BOARD WITH 12 LEDS, MOLDED PLASTIC REFLECTOR WITH SPECULAR FINISH AND 1 APERTURE PER LED, CLEAR PRISMATIC PLASTIC LENS. CLEAR PLASTIC EXTERIOR LENS WITH LINEAR PRISMATIC FORWARD CENTER SECTION. SWIVEL HEAD ASSEMBLY LENS PRISMS IN. EXTERIOR LENS PRISMS IN AND PARALLEL WITH THE LENGTH OF HOUSING. ONLY ONE HEAD ASSEMBLY ENERGIZED FOR THIS TEST. THE SWIVEL HEAD ASSEMBLY WAS SET IN CLIENT REQUESTED POSITION WHICH IS AIMED AT THE HORIZON AND CANTED OUT APPROXIMATELY 25-DEGREES FROM STRAIGHT AHEAD WHEN THE LUMINAIRE IS VERTICAL AND LEVEL. FOR THIS TEST, THE LUMINAIRE WAS POSITIONED TO PLACE THE LEDS IN THE VERTICAL BASE-UP POSITION (AIMED TOWARDS NADIR).

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

INPUT ELECTRICAL: 3.60 VOLTS, 1.36 WATTS, 0.378 AMPS

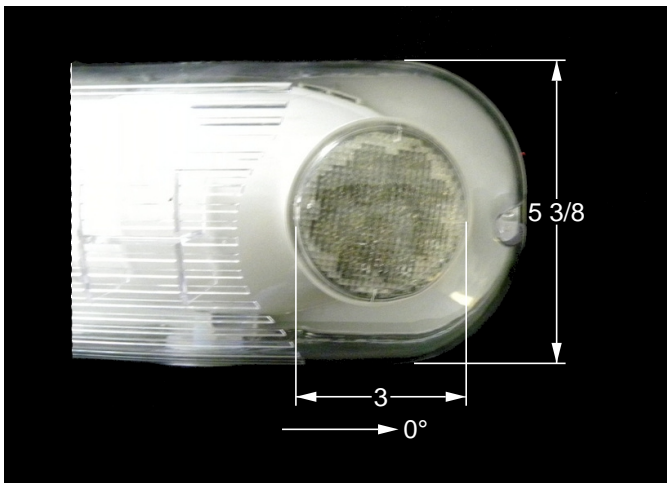
MOUNTING: SURFACE

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.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET



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.

Checked	<i>M KLOPF</i> TECHNICIAN
Approved	<i>R BEATTIE</i> LIGHTING ENGINEER

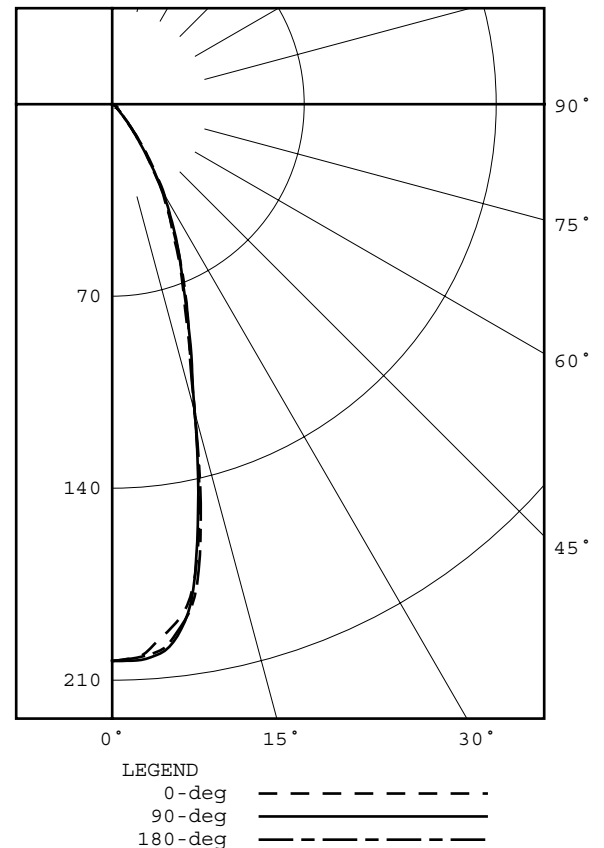
REPORT NUMBER: ITL89344-GONIOPHOTOMETRY
ISSUE DATE: 06/14/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
CATALOG NUMBER: PAC0435WH-U-W

PAGE: 2 OF 6

CANDELA DISTRIBUTION						FLUX
	0.0	45.0	90.0	135.0	180.0	
0	203	203	203	203	203	
5	196	198	201	202	200	18.4
15	116	138	116	141	116	34.8
25	53	55	56	57	55	25.4
35	21	20	19	20	21	12.6
45	5	5	4	5	5	4.0
55	2	2	2	2	2	1.8
65	1	1	1	1	1	1.0
75	1	1	1	1	0	0.7
85	0	0	0	0	0	0.0
90	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	0	0	0	0.0
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

ZONAL LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	78.6	79.6
0- 40	91.3	92.4
0- 60	97.0	98.3
0- 90	98.7	100.0
90-120	0.0	0.0
90-130	0.0	0.0
90-150	0.0	0.0
90-180	0.0	0.0
0-180	98.7	100.0

EFFICACY = 72.6 lm/W
CIE TYPE - DIRECT
PLANE : 0-DEG 90-DEG 180-DEG
SPACING CRITERIA : 0.55 0.55 0.55
BEAM ANGLE (50%) : 33.3 X 33.6 DEGREES
FIELD ANGLE (10%) : 70.5 X 69.2 DEGREES





PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL89344-GONIOPHOTOMETRY

PAGE: 3 OF 6

ISSUE DATE: 06/14/17

PREPARED FOR: PACE ELECTRONICS PRODUCTS

CATALOG NUMBER: PAC0435WH-U-W

CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0.0	203	203	203	203	203	203	203	203	203
5.0	196	197	198	201	201	202	202	201	200
10.0	174	179	182	177	174	179	183	182	178
15.0	116	124	138	122	116	123	141	128	116
20.0	77	80	85	82	79	83	84	80	80
25.0	53	54	55	55	56	55	57	55	55
30.0	38	36	33	36	37	35	33	34	36
35.0	21	20	20	19	19	19	20	19	21
40.0	9	10	11	9	9	9	11	9	9
45.0	5	5	5	4	4	5	5	4	5
50.0	3	3	3	3	3	3	3	3	3
55.0	2	2	2	2	2	2	2	2	2
60.0	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1
75.0	1	1	1	1	1	1	1	1	0
80.0	0	0	0	0	0	0	0	0	0
85.0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0
110.0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	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



PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL89344-GONIOPHOTOMETRY
ISSUE DATE: 06/14/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
CATALOG NUMBER: PAC0435WH-U-W

PAGE: 4 OF 6

5-DEGREE
 ZONAL LUMEN SUMMARY

0- 5	4.8
5- 10	13.6
10- 15	18.1
15- 20	16.7
20- 25	14.1
25- 30	11.3
30- 35	7.9
35- 40	4.7
40- 45	2.5
45- 50	1.5
50- 55	1.0
55- 60	0.8
60- 65	0.5
65- 70	0.5
70- 75	0.5
75- 80	0.2
80- 85	0.0
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	0.0
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	18.4
0- 20	53.2
0- 30	78.6
0- 40	91.3
0- 50	95.2
0- 60	97.0
0- 70	98.0
0- 80	98.7
0- 90	98.7
0-100	98.7
0-110	98.7
0-120	98.7
0-130	98.7
0-140	98.7
0-150	98.7
0-160	98.7
0-170	98.7
0-180	98.7



INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL89344-GONIOPHOTOMETRY
ISSUE DATE: 06/14/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
CATALOG NUMBER: PAC0435WH-U-W

PAGE: 5 OF 6

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	114	111	110	91	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88	88
3	104	98	93	90	102	96	92	89	94	90	87	92	89	86	89	87	85	83	83
4	99	92	87	83	98	91	86	83	89	85	82	87	84	81	85	82	80	79	79
5	95	87	82	78	93	86	81	78	85	80	77	83	79	76	82	78	76	74	74
6	91	83	77	74	90	82	77	73	81	76	73	79	75	72	78	75	72	71	71
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67	67
8	84	75	70	66	83	75	69	66	74	69	66	73	68	65	72	68	65	64	64
9	80	72	66	63	79	71	66	63	70	66	63	70	65	62	69	65	62	61	61
10	77	69	63	60	76	68	63	60	67	63	60	67	63	60	66	62	59	58	58

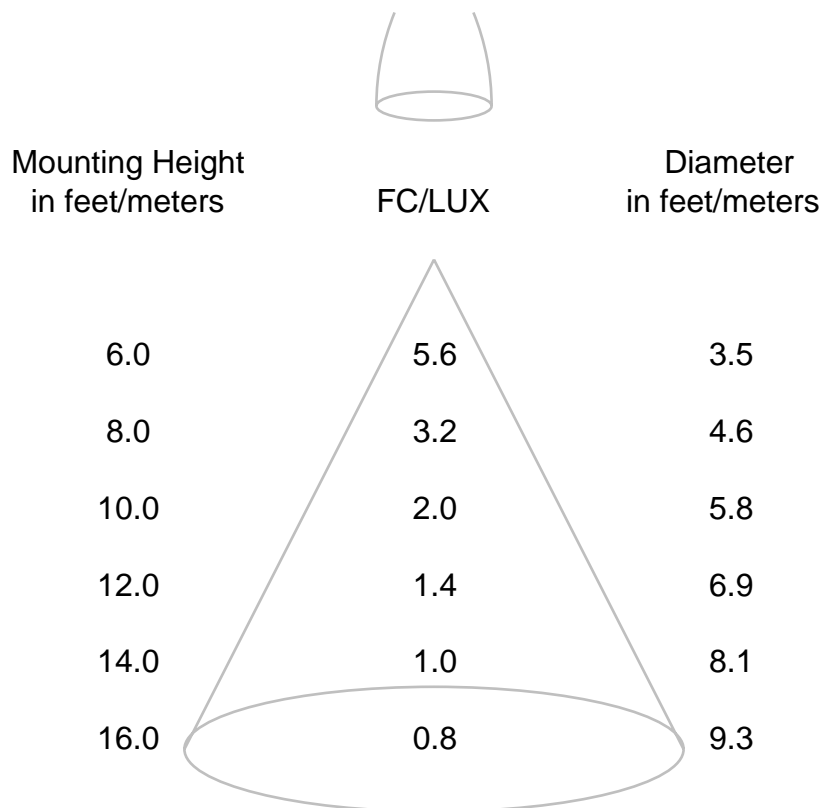
ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

REPORT NUMBER: ITL89344-GONIOPHOTOMETRY
ISSUE DATE: 06/14/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
CATALOG NUMBER: PAC0435WH-U-W

PAGE: 6 OF 6

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.