

REPORT NUMBER: ITL89343-GONIOPHOTOMETRY

PAGE: 1 OF 6

ISSUE DATE: 06/13/17

PREPARED FOR: PACE ELECTRONICS PRODUCTS

ADDRESS: 34 FOLEY DRIVE
SODUS, NY 14551

CATALOG NUMBER: PAC0435WH-U

LUMINAIRE: MOLDED WHITE PLASTIC 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. LENS PRISMS IN. 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

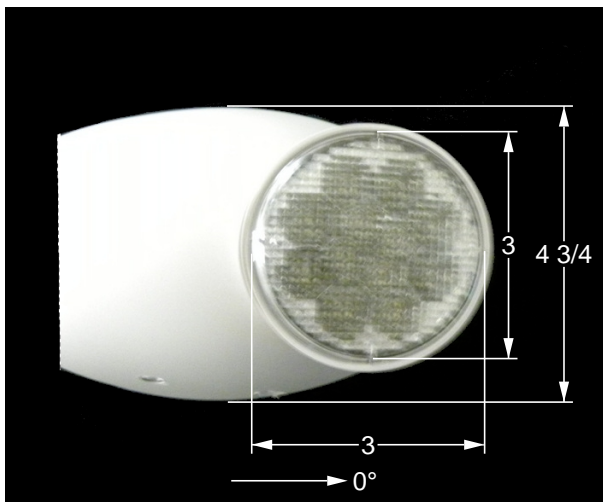
MOUNTING: SURFACE

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

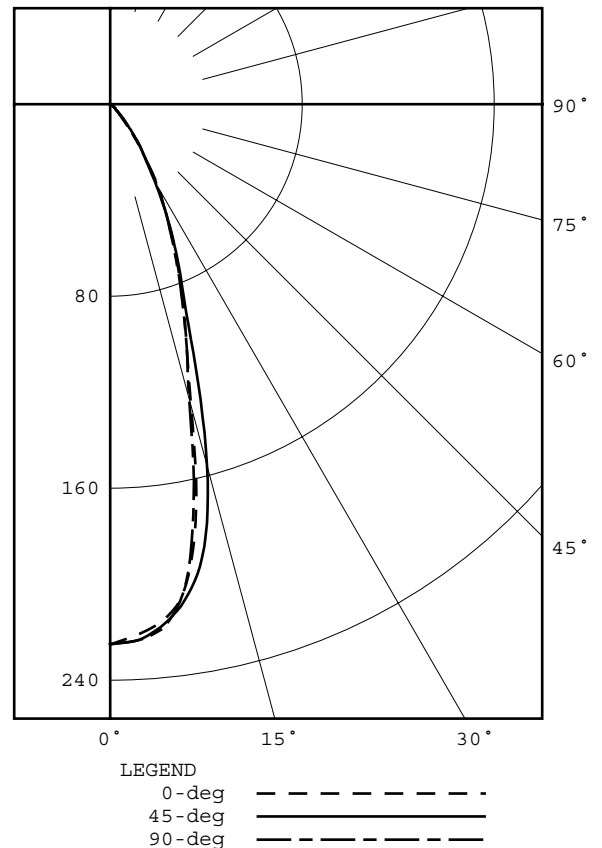
REPORT NUMBER: ITL89343-GONIOPHOTOMETRY
ISSUE DATE: 06/13/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
CATALOG NUMBER: PAC0435WH-U

PAGE: 2 OF 6

CANDELA DISTRIBUTION						FLUX
	0.0	22.5	45.0	67.5	90.0	
0	225	225	225	225	225	
5	218	219	220	221	221	20
15	130	140	156	136	127	39
25	61	62	62	60	60	28
35	22	22	22	21	21	14
45	4	4	5	4	4	4
55	1	2	2	2	1	1
65	1	1	1	1	1	1
75	0	0	0	0	0	0
85	0	0	0	0	0	0
90	0	0	0	0	0	0
95	0	0	0	0	0	0
105	0	0	0	0	0	0
115	0	0	0	0	0	0
125	0	0	0	0	0	0
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

ZONAL LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	87	81.3
0- 40	101	94.1
0- 60	106	99.0
0- 90	107	100.0
90-120	0	0.0
90-130	0	0.0
90-150	0	0.0
90-180	0	0.0
0-180	107	100.0

EFFICACY = 78.7 lm/W
CIE TYPE - DIRECT
PLANE : 0-DEG 90-DEG
SPACING CRITERIA : 0.55 0.54
BEAM ANGLE (50%) : 33.6 X 33.5 DEGREES
FIELD ANGLE (10%) : 69.6 X 69.1 DEGREES





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

REPORT NUMBER: ITL89343-GONIOPHOTOMETRY
ISSUE DATE: 06/13/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
CATALOG NUMBER: PAC0435WH-U

PAGE: 3 OF 6

CANDELA DISTRIBUTION
 LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	225	225	225	225	225
5.0	218	219	220	221	221
10.0	194	199	202	196	192
15.0	130	140	156	136	127
20.0	89	90	93	91	88
25.0	61	62	62	60	60
30.0	41	38	37	38	39
35.0	22	22	22	21	21
40.0	9	10	11	9	9
45.0	4	4	5	4	4
50.0	2	3	3	2	2
55.0	1	2	2	2	1
60.0	1	1	1	1	1
65.0	1	1	1	1	1
70.0	1	1	1	0	1
75.0	0	0	0	0	0
80.0	0	0	0	0	0
85.0	0	0	0	0	0
90.0	0	0	0	0	0
95.0	0	0	0	0	0
100.0	0	0	0	0	0
105.0	0	0	0	0	0
110.0	0	0	0	0	0
115.0	0	0	0	0	0
120.0	0	0	0	0	0
125.0	0	0	0	0	0
130.0	0	0	0	0	0
135.0	0	0	0	0	0
140.0	0	0	0	0	0
145.0	0	0	0	0	0
150.0	0	0	0	0	0
155.0	0	0	0	0	0
160.0	0	0	0	0	0
165.0	0	0	0	0	0
170.0	0	0	0	0	0
175.0	0	0	0	0	0
180.0	0	0	0	0	0



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

REPORT NUMBER: ITL89343-GONIOPHOTOMETRY
ISSUE DATE: 06/13/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
CATALOG NUMBER: PAC0435WH-U

PAGE: 4 OF 6

5-DEGREE
 ZONAL LUMEN SUMMARY

0- 5	5
5- 10	15
10- 15	20
15- 20	19
20- 25	16
25- 30	12
30- 35	9
35- 40	5
40- 45	2
45- 50	1
50- 55	1
55- 60	1
60- 65	0
65- 70	0
70- 75	0
75- 80	0
80- 85	0
85- 90	0
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	20
0- 20	59
0- 30	87
0- 40	101
0- 50	105
0- 60	106
0- 70	107
0- 80	107
0- 90	107
0-100	107
0-110	107
0-120	107
0-130	107
0-140	107
0-150	107
0-160	107
0-170	107
0-180	107



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: ITL89343-GONIOPHOTOMETRY
ISSUE DATE: 06/13/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
CATALOG NUMBER: PAC0435WH-U

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	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89
3	104	99	94	90	102	97	93	90	95	91	88	92	89	87	90	88	86	84	84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80	80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75	75
6	92	84	78	75	90	83	78	74	82	77	74	80	76	73	79	76	73	72	72
7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68	68
8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	73	69	66	65	65
9	81	73	67	64	80	72	67	64	71	67	64	70	66	63	70	66	63	62	62
10	78	70	64	61	77	69	64	61	68	64	61	68	64	61	67	63	60	59	59

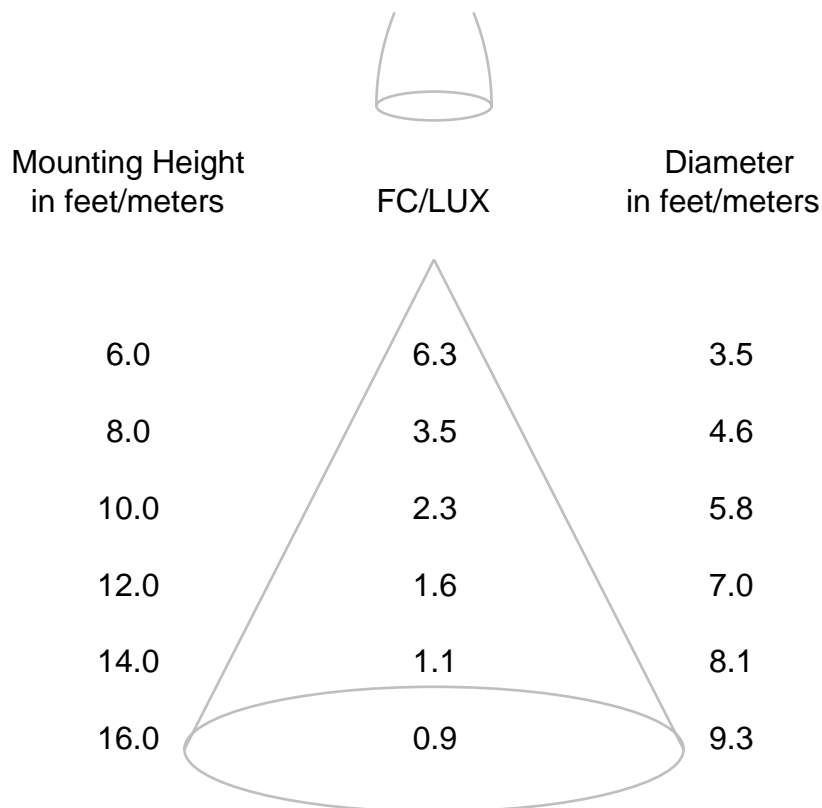
ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

REPORT NUMBER: ITL89343-GONIOPHOTOMETRY
ISSUE DATE: 06/13/17
PREPARED FOR: PACE ELECTRONICS PRODUCTS
CATALOG NUMBER: PAC0435WH-U

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.