



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



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

REPORT NUMBER:

ITL89445-GONIOPHOTOMETRY

PAGE: 1

ISSUE DATE: 07/24/17

PREPARED FOR: LUMOS LIGHTING

ADDRESS: 2385 S. DELAWARE STREET
DENVER, CO 80223

CATALOG NUMBER: LC8-72

LUMINAIRE:

3-SIDED WHITE PAINTED EXTRUDED METAL CENTER MOUNTING STEM, 1 CIRCUIT BOARD WITH 108 LEDS ON EACH SIDE OF CENTER STEM, TRANSLUCENT WHITE CYLINDRICAL PLASTIC DIFFUSER/HOUSING.

LAMPS: THREE HUNDRED TWENTY-FOUR WHITE LIGHT EMITTING DIODES (LEDS), AIMED AT THE HORIZON.

INPUT ELECTRICAL: 120.0 VOLTS, 97.5 WATTS, 0.815 AMPS

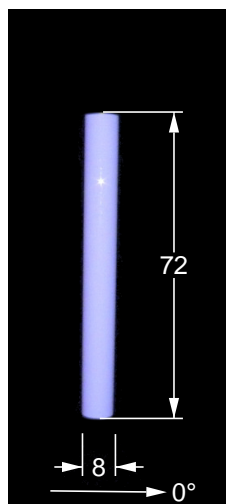
MOUNTING: PENDANT

LED DRIVER: ACELEDS AC-98CD2.1APMX, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST, CLIENT STATES DRIVER PROGRAMMED FOR 1050mA OUTPUT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE DRIVER.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 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	<u>M KLOPF</u> TECHNICIAN
Approved	<u>R BEATTIE</u> LIGHTING ENGINEER

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DEG	CANDELA	LUMENS
0	0	
5	25	4
15	162	48
25	321	151
35	482	305
45	629	488
55	753	675
65	849	842
75	914	966
85	945	1029
90	948	
95	945	1030
105	916	968
115	851	844
125	757	679
135	635	492
145	489	308
155	326	153
165	157	47
175	21	4
180	0	

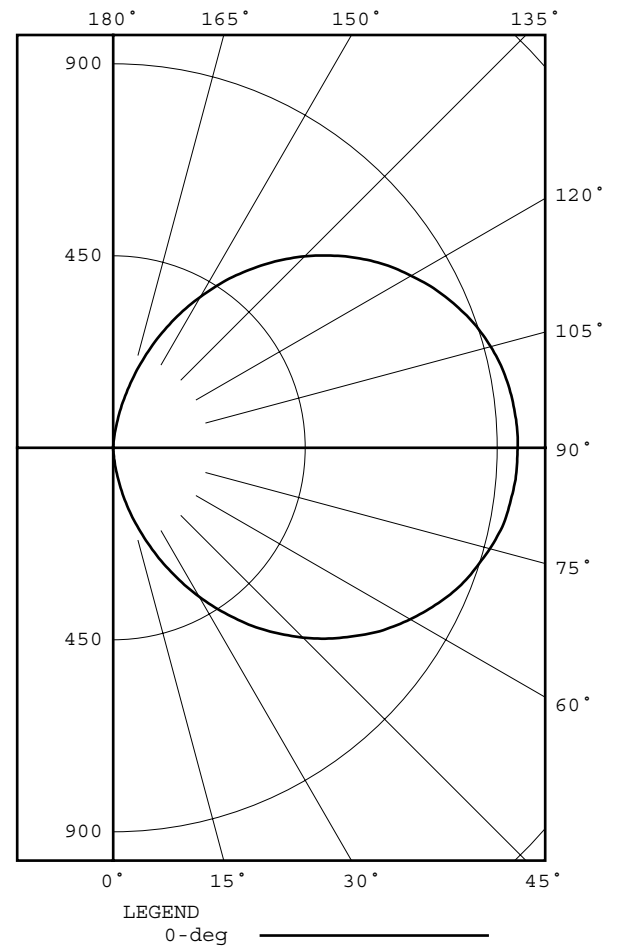
ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXT
0- 30	203	2.3
0- 40	508	5.6
0- 60	1671	18.5
0- 90	4507	49.9
90-120	2841	31.5
90-130	3520	39.0
90-150	4320	47.8
90-180	4524	50.1
0-180	9031	100.0

EFFICACY = 92.6 lm/W

CIE TYPE - GENERAL DIFFUSE

BEAM ANGLE (50%) : 111.5 DEGREES

FIELD ANGLE (10%) : 158.6 DEGREES





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LUMINANCE DATA IN CANDELA/SQ M
ANGLE AVERAGE
IN DEG

45	2396.
55	2476.
65	2523.
75	2548.
85	2555.



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CANDELA DISTRIBUTION

0.0	0
5.0	25
10.0	89
15.0	162
20.0	239
25.0	321
30.0	403
35.0	482
40.0	559
45.0	629
50.0	693
55.0	753
60.0	804
65.0	849
70.0	886
75.0	914
80.0	935
85.0	945
90.0	948
95.0	945
100.0	935
105.0	916
110.0	888
115.0	851
120.0	806
125.0	757
130.0	699
135.0	635
140.0	564
145.0	489
150.0	408
155.0	326
160.0	241
165.0	157
170.0	80
175.0	21
180.0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0
5- 10	4
10- 15	15
15- 20	33
20- 25	59
25- 30	92
30- 35	131
35- 40	174
40- 45	220
45- 50	267
50- 55	315
55- 60	360
60- 65	402
65- 70	440
70- 75	471
75- 80	495
80- 85	511
85- 90	518
90- 95	519
95-100	511
100-105	496
105-110	472
110-115	440
115-120	403
120-125	362
125-130	317
130-135	270
135-140	222
140-145	176
145-150	132
150-155	93
155-160	60
160-165	33
165-170	14
170-175	4
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	4
0- 20	53
0- 30	203
0- 40	508
0- 50	996
0- 60	1671
0- 70	2512
0- 80	3478
0- 90	4507
0-100	5537
0-110	6505
0-120	7348
0-130	8027
0-140	8519
0-150	8827
0-160	8980
0-170	9027
0-180	9031



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	92	85	79	73	84	78	72	67	64	60	56	52	49	46	40	38	36	30
2	81	71	62	55	74	65	57	51	53	47	42	42	38	34	32	29	26	20
3	73	60	51	43	66	55	47	40	45	38	33	35	30	26	27	23	19	15
4	66	52	42	35	59	48	39	32	39	32	26	30	25	21	23	18	15	11
5	60	46	36	29	54	42	33	26	34	27	21	27	21	17	20	15	12	8
6	55	40	31	24	49	37	28	22	30	23	18	23	18	14	17	13	10	7
7	50	36	27	20	45	33	25	19	27	20	15	21	16	12	16	11	8	5
8	46	32	24	18	42	30	22	16	24	18	13	19	14	10	14	10	7	4
9	43	29	21	15	39	27	19	14	22	16	11	17	12	9	13	9	6	4
10	40	27	19	13	36	24	17	12	20	14	10	16	11	8	12	8	5	3

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.