

**REPORT NUMBER:** ITL93882-GONIOPHOTOMETRY

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**ISSUE DATE:** 09/10/20

**PREPARED FOR:** LITELAB CORPORATION

**ADDRESS:** 251 ELM STREET

BUFFALO, NY 14203

**CATALOG NUMBER:** C83L1600-9TC-A-9830P-37

**LUMINAIRE:** FABRICATED WHITE PAINTED METAL MOUNTING ARM AND DRIVER HOUSING, CAST WHITE PAINTED METAL HOUSING WITH FINNED HEAT SINK, ONE CIRCUIT BOARD WITH ONE LED, MOLDED WHITE PLASTIC LED SURROUND, MOLDED PLASTIC OPTIC MOUNTING RING, CLEAR MICRO-PRISMATIC PLASTIC OPTIC, OPTIC WITH RECESSED MULTI-FACETED AND SEMI-HEMISPHERICAL TEXTURED TOP CENTER, RECESSED CONVEX MICRO-PRISMATIC BOTTOM CENTER IN MOLDED BLACK PLASTIC FRAME. MOLDED BLACK PLASTIC LOWER BAFFLE.

**LAMP:** ONE WHITE LIGHT EMITTING DIODE (LED), VERTICAL BASE-UP POSITION.

**MOUNTING:** TRACK

**LED DRIVER:** LITELAB PROPRIETARY

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

**INPUT ELECTRICAL:** 120.0 VOLTS, 13.1 WATTS, 0.112 AMPS

POWER FACTOR: 97.5%, VOLTAGE THD: 0.1, CURRENT THD: 6.2

TEST PROCEDURE: IESNA LM-79-19

TEST DISTANCE = 20.0 FEET

AMBIENT: 25.4



BOTTOM VIEW

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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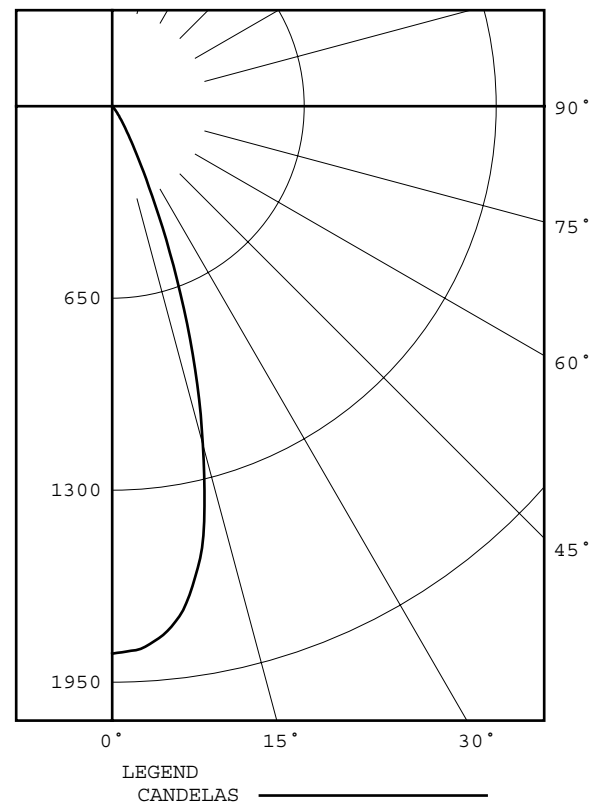
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DEG	CANDELA	LUMENS
0	1853	
5	1808	167
15	1187	320
25	273	139
35	37	27
45	2	3
55	1	1
65	0	0
75	0	0
85	0	0
90	0	

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXT
0- 30	626	95.4
0- 40	653	99.5
0- 60	656	100.0
0- 90	656	100.0
90-180	0	0.0
0-180	656	100.0

EFFICACY = 50.1 lm/W  
 CIE TYPE - DIRECT  
 SPACING CRITERION: 0.55  
 BEAM ANGLE (50%) : 35.1 DEGREES  
 FIELD ANGLE (10%) : 54.1 DEGREES  
 LUMINOUS DIAMETER: 2.250

LUMINANCE DATA IN CANDELA/SQ M	
ANGLE	AVERAGE
IN DEG	
45	1103.
55	680.
65	0.
75	0.
85	0.





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CANDELA DISTRIBUTION

0.0	1853
2.5	1843
5.0	1808
7.5	1742
10.0	1619
12.5	1440
15.0	1187
17.5	934
20.0	676
22.5	445
25.0	273
27.5	165
30.0	102
32.5	62
35.0	37
37.5	21
40.0	10
42.5	4
45.0	2
47.5	2
50.0	1
52.5	1
55.0	1
57.5	1
60.0	1
62.5	0
65.0	0
67.5	0
70.0	0
72.5	0
75.0	0
77.5	0
80.0	0
82.5	0
85.0	0
87.5	0
90.0	0



INDEPENDENT TESTING LABORATORIES, INC.
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Table with 2 columns: ZONAL LUMEN and SUMMARY for 5-DEGREE. Rows range from 0-5 to 85-90.

Table with 2 columns: ZONAL LUMEN and SUMMARY for 10-DEGREE. Rows range from 0-10 to 0-90.



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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	115	113	111	110	112	110	109	107	106	105	104	103	102	101	99	99	98	98	96
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92	92
3	107	102	98	95	105	101	97	94	98	95	93	96	94	92	94	92	90	89	89
4	103	98	93	90	102	97	93	90	95	91	89	93	90	88	91	89	87	85	85
5	100	94	89	86	98	93	89	86	91	88	85	90	87	84	88	86	84	82	82
6	97	90	85	82	95	89	85	82	88	84	81	87	83	81	85	83	80	79	79
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77	77
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74	74
9	88	81	76	73	87	80	76	73	79	76	73	79	75	73	78	75	73	72	72
10	85	78	74	71	84	78	73	71	77	73	71	76	73	70	76	72	70	69	69

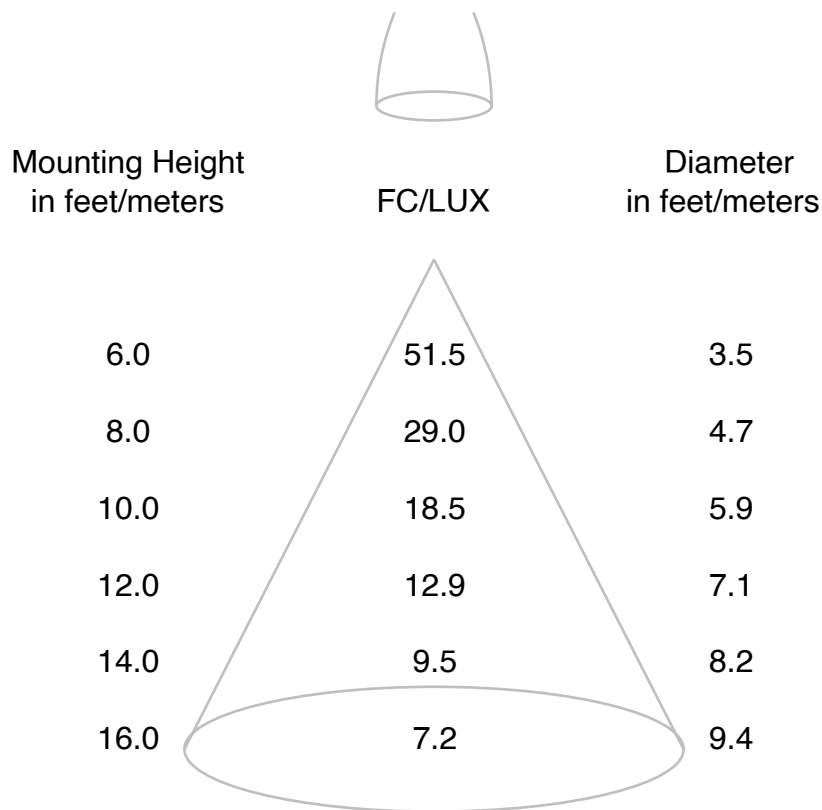
ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

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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.