

REPORT NUMBER: ITL93874-GONIOPHOTOMETRY

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ISSUE DATE: 09/10/20

PREPARED FOR: LITELAB CORPORATION

ADDRESS: 251 ELM STREET

BUFFALO, NY 14203

CATALOG NUMBER: C82L1600-(FITTER)-(VOLTAGE)-9230-(FINISH)

LUMINAIRE: FABRICATED METAL MOUNTING BRACKET/LED DRIVER HOUSING, CAST WHITE PAINTED METAL HOUSING WITH WHITE PAINTED FINNED METAL HEAT SINK, ONE CIRCUIT BOARD WITH ONE LED, MOLDED WHITE PLASTIC LED SURROUND, CLEAR PRISMATIC PLASTIC OPTIC WITH RECESSED SEMI-HEMISPHERICAL TOP CENTER AND RECESSED CONICAL BOTTOM CENTER IN MOLDED BLACK PLASTIC FRAME, FROSTED PLASTIC LENS IN MOLDED BLACK PLASTIC FRAME, FORMED SEMI-DIFFUSE METAL REFLECTOR BELOW LENS ON THE 180-DEGREE PLANE. LENS FROSTED SIDE UP.

LAMP: ONE WHITE MULTI-CHIP 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.

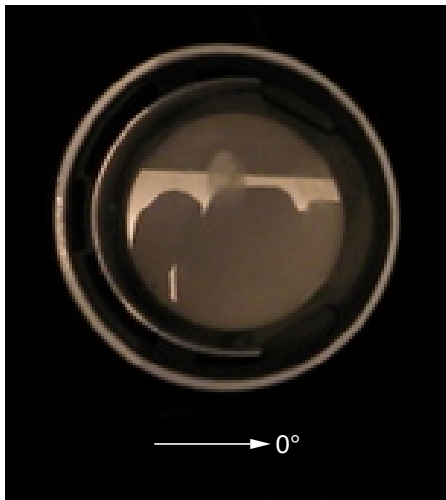
INPUT ELECTRICAL: 120.0 VOLTS, 13.0 WATTS, 0.112 AMPS

POWER FACTOR: 96.7%, VOLTAGE THD: 0.1, CURRENT THD: 11.6

TEST PROCEDURE: IESNA LM-79-19

TEST DISTANCE = 20.0 FEET

AMBIENT: 25.3



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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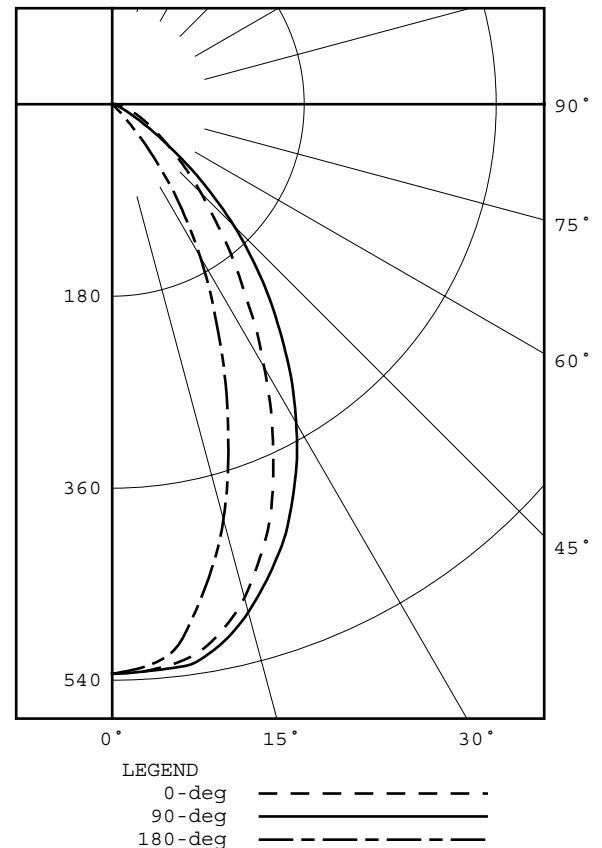
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CANDELA DISTRIBUTION						FLUX
	0.0	45.0	90.0	135.0	180.0	
0	534	534	534	534	534	
5	530	532	532	527	523	50
15	479	500	493	434	403	130
25	357	408	402	292	235	160
35	217	280	283	160	101	137
45	118	162	162	31	9	82
55	59	79	55	3	0	38
65	29	32	13	1	0	16
75	12	11	3	0	0	6
85	5	4	1	0	0	2
90	3	2	0	0	0	
95	2	2	0	0	0	1
105	1	1	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 ZONE	LUMEN LUMENS	SUMMARY %FIXT
0- 30	340	54.6
0- 40	478	76.7
0- 60	598	96.0
0- 90	622	99.8
90-120	1	0.2
90-130	1	0.2
90-150	1	0.2
90-180	1	0.2
0-180	623	100.0

EFFICACY = 47.9 lm/W
CIE TYPE - DIRECT
PLANE : 0-DEG 90-DEG 180-DEG
SPACING CRITERIA : 0.93 1.03 0.72
BEAM ANGLE (50%) : 54.4 X 72.6 DEGREES
FIELD ANGLE (10%) : 95.6 X 110.5 DEGREES





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

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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	534	534	534	534	534	534	534	534	534
5.0	530	531	532	533	532	530	527	523	523
10.0	515	517	523	529	523	507	491	479	473
15.0	479	484	500	509	493	465	434	411	403
20.0	426	436	461	473	452	412	365	330	317
25.0	357	374	408	424	402	350	292	249	235
30.0	285	305	345	369	345	287	225	179	165
35.0	217	237	280	309	283	225	160	115	101
40.0	162	178	217	246	222	161	91	52	43
45.0	118	130	162	187	162	92	31	12	9
50.0	84	92	114	133	103	36	6	1	1
55.0	59	64	79	87	55	12	3	1	0
60.0	42	44	51	52	26	7	2	0	0
65.0	29	30	32	28	13	3	1	0	0
70.0	20	20	19	15	6	1	0	0	0
75.0	12	12	11	8	3	1	0	0	0
80.0	7	7	7	4	1	0	0	0	0
85.0	5	5	4	2	1	0	0	0	0
90.0	3	3	2	1	0	0	0	0	0
95.0	2	2	2	1	0	0	0	0	0
100.0	1	1	1	1	0	0	0	0	0
105.0	1	1	1	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



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	13
5- 10	37
10- 15	58
15- 20	72
20- 25	80
25- 30	80
30- 35	74
35- 40	63
40- 45	48
45- 50	34
50- 55	23
55- 60	15
60- 65	10
65- 70	6
70- 75	4
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	50
0- 20	180
0- 30	340
0- 40	478
0- 50	560
0- 60	598
0- 70	614
0- 80	620
0- 90	622
0-100	623
0-110	623
0-120	623
0-130	623
0-140	623
0-150	623
0-160	623
0-170	623
0-180	623



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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	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82
3	99	91	86	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75
4	93	84	78	73	91	83	77	72	81	75	71	79	74	70	77	73	70	68
5	87	78	71	66	86	77	70	66	75	69	65	73	68	64	71	67	64	62
6	82	72	65	60	81	71	65	60	69	64	59	68	63	59	67	62	58	57
7	77	67	60	55	76	66	60	55	65	59	55	63	58	54	62	58	54	52
8	73	62	55	51	72	62	55	51	60	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	52	47	43	52	47	43	42

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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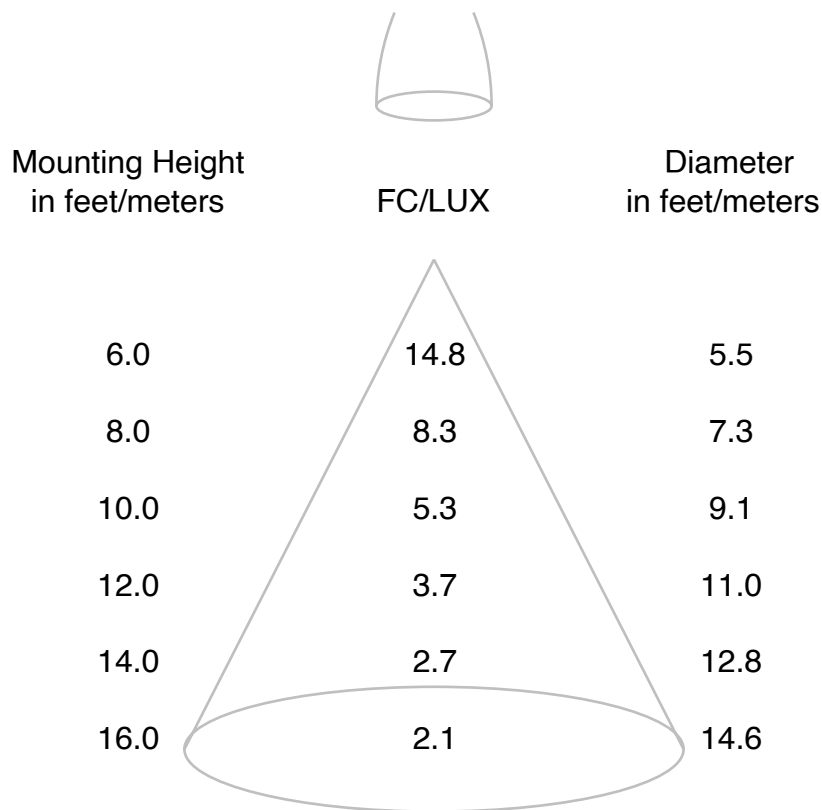
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CONE OF LIGHT DIAGRAM

(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.