

REPORT NUMBER: ITL93873-GONIOPHOTOMETRY

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ISSUE DATE: 09/10/20

PREPARED FOR: LITELAB CORPORATION

ADDRESS: 251 ELM STREET

BUFFALO, NY 14203

CATALOG NUMBER: C82L1400-9TC-A-9830P

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.

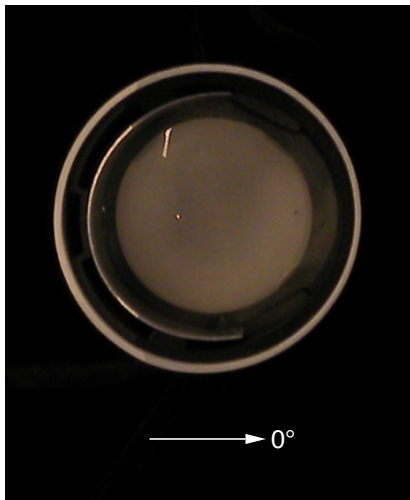
INPUT ELECTRICAL: 120.0 VOLTS, 14.1 WATTS, 0.121 AMPS

POWER FACTOR: 97.1%, VOLTAGE THD: 0.1, CURRENT THD: 11.6

TEST PROCEDURE: IESNA LM-79-19

TEST DISTANCE = 20.0 FEET

AMBIENT: 25.5



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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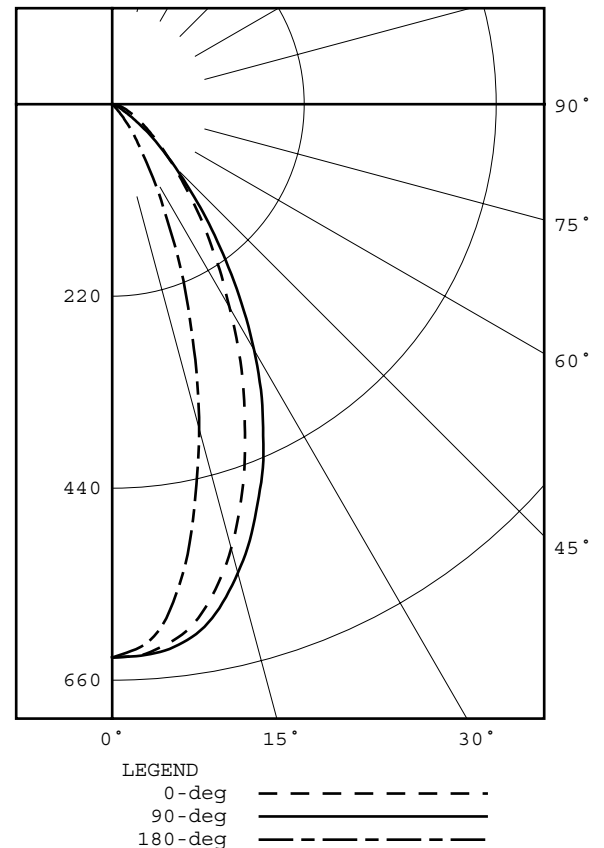
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CANDELA DISTRIBUTION						FLUX
	0.0	45.0	90.0	135.0	180.0	
0	634	634	634	634	634	
5	625	631	630	615	606	58
15	527	565	556	444	385	140
25	355	419	409	233	155	151
35	198	255	238	87	44	110
45	99	126	103	16	4	59
55	48	55	32	3	0	26
65	23	22	8	1	0	11
75	10	8	2	0	0	4
85	4	3	1	0	0	2
90	3	2	0	0	0	
95	2	1	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 LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	349	62.0
0- 40	459	81.6
0- 60	544	96.8
0- 90	561	99.8
90-120	1	0.2
90-130	1	0.2
90-150	1	0.2
90-180	1	0.2
0-180	562	100.0

EFFICACY = 39.9 lm/W
CIE TYPE - DIRECT PLANE : 0-DEG 90-DEG 180-DEG
SPACING CRITERIA : 0.82 0.91 0.58
BEAM ANGLE (50%) : 44.9 X 60.9 DEGREES
FIELD ANGLE (10%) : 83.3 X 99.6 DEGREES





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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	634	634	634	634	634	634	634	634	634
5.0	625	628	631	632	630	624	615	610	606
10.0	592	597	609	619	608	578	546	516	511
15.0	527	536	565	578	556	503	444	399	385
20.0	443	460	498	517	487	416	335	279	259
25.0	355	374	419	443	409	325	233	174	155
30.0	269	291	336	360	325	235	147	100	84
35.0	198	216	255	277	238	155	87	53	44
40.0	141	154	184	199	162	96	46	23	18
45.0	99	107	126	134	103	51	16	6	4
50.0	69	73	84	86	62	20	5	1	1
55.0	48	49	55	53	32	9	3	1	0
60.0	33	33	35	32	15	5	2	0	0
65.0	23	23	22	18	8	2	1	0	0
70.0	16	15	14	10	4	1	0	0	0
75.0	10	10	8	6	2	0	0	0	0
80.0	6	6	5	3	1	0	0	0	0
85.0	4	4	3	2	1	0	0	0	0
90.0	3	3	2	1	0	0	0	0	0
95.0	2	2	1	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	1	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	15
5- 10	43
10- 15	64
15- 20	76
20- 25	78
25- 30	72
30- 35	62
35- 40	48
40- 45	35
45- 50	24
50- 55	16
55- 60	10
60- 65	7
65- 70	4
70- 75	3
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	58
0- 20	198
0- 30	349
0- 40	459
0- 50	518
0- 60	544
0- 70	555
0- 80	560
0- 90	561
0-100	562
0-110	562
0-120	562
0-130	562
0-140	562
0-150	562
0-160	562
0-170	562
0-180	562



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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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84
3	100	93	88	83	98	92	87	83	89	85	81	87	83	80	84	81	79	77
4	95	86	80	76	93	85	80	75	83	78	74	81	77	73	79	75	73	71
5	89	80	74	69	88	79	73	69	77	72	68	76	71	68	74	70	67	65
6	85	75	68	64	83	74	68	64	73	67	63	71	66	63	70	65	62	61
7	80	70	64	59	79	69	63	59	68	63	59	67	62	58	66	61	58	56
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	57	54	53
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	56	51	48	46

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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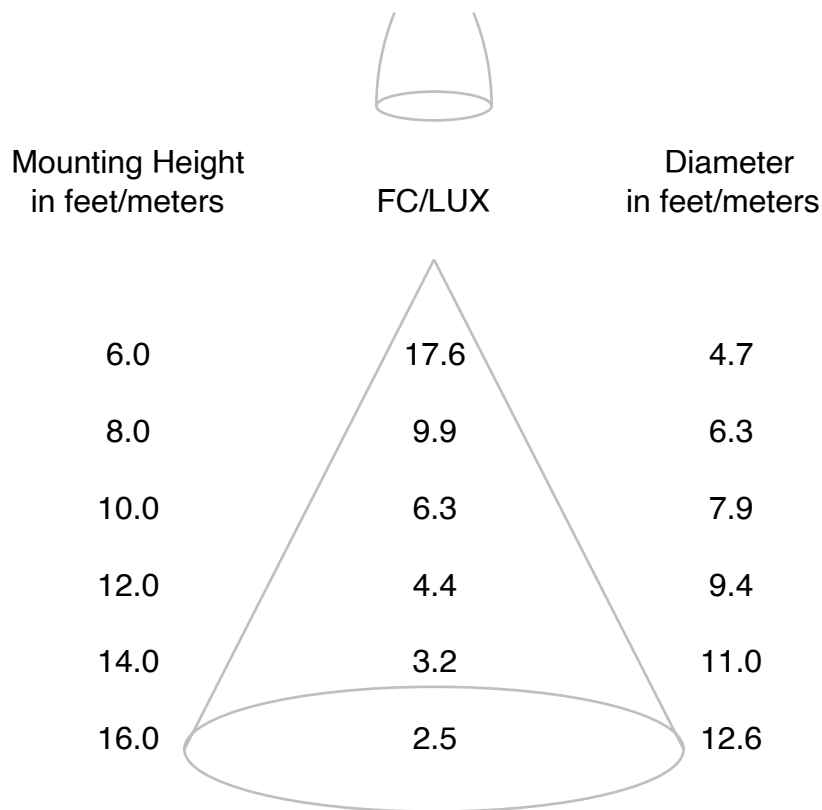
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CONE OF LIGHT DIAGRAM

(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.