

REPORT NUMBER: ITL91974-GONIOPHOTOMETRY

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ISSUE DATE: 07/01/19

PREPARED FOR: LUMOS LIGHTING

ADDRESS: 2385 S DELAWARE STREET
DENVER, CO 80223

CATALOG NUMBER: DNL-S

LUMINAIRE: BOTTOM OPTICAL COMPARTMENT CONSISTS OF: EXTRUDED BLACK
FINISHED FINNED METAL HEAT SINK, 1 CIRCUIT BOARD WITH ONE LED,
MOLDED MULTI-FACETED SPECULAR PLASTIC BOTTOM REFLECTOR. OPEN
BOTTOM.

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

INPUT ELECTRICAL: 120.0 VOLTS, 16.7 WATTS, 0.140 AMPS

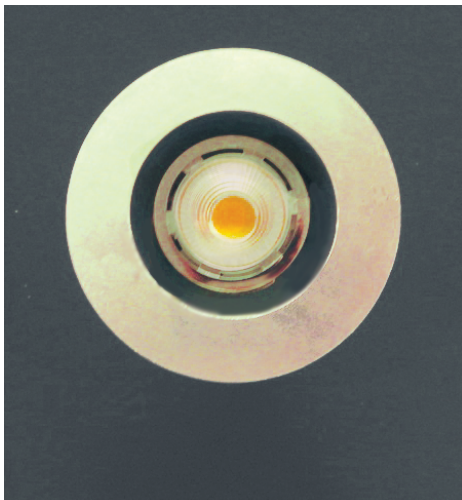
MOUNTING: PENDANT

LED DRIVER: AC ELECTRONICS AC-40CD1.4APMZ, DRIVER HAS MULTIPLE LEADS, ONLY
LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST. CLIENT STATES
DRIVER PROGRAMMED FOR 400mA OUTPUT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE
(120VAC, 60Hz) TO THE DRIVER. DUE TO THE SIZE OF THE LUMINAIRE AND
GONIOPHOTOMETER SIZE LIMITATIONS, THIS TEST WAS PERFORMED WITH THE LIGHT
OPENING 21" BELOW THE PHOTOMETRIC CENTER OF THE GONIOPHOTOMETER. THE
DATA WAS MATHEMATICALLY CORRECTED SO THAT THE DISTRIBUTION REPORTED
REPRESENTS THE PERFORMANCE WITH THE PHOTOMETRIC CENTER AT THE BOTTOM
LIGHT OPENING.

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.

Approved R BERGIN

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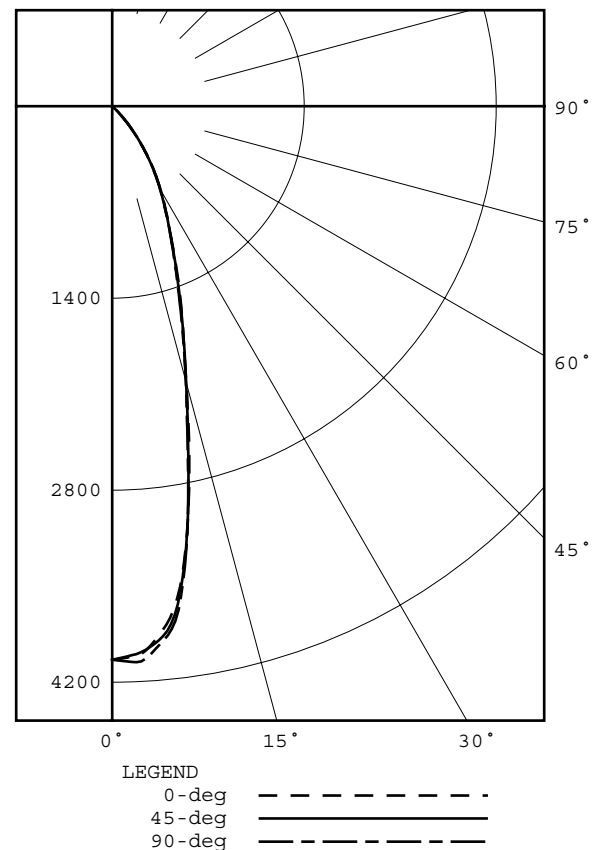
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CANDELA DISTRIBUTION						FLUX
	0.0	22.5	45.0	67.5	90.0	
0	4037	4037	4037	4037	4037	
5	3876	3950	3909	3939	3942	351
15	2086	2080	2081	2076	2074	587
25	990	981	988	983	984	460
35	455	455	457	453	462	285
45	66	70	71	69	70	68
55	0	0	0	0	0	1
65	0	0	0	0	0	0
75	0	0	0	0	0	0
85	0	0	0	0	0	0
90	0	0	0	0	0	0

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXT
0- 30	1399	79.8
0- 40	1683	96.1
0- 60	1752	100.0
0- 90	1752	100.0
90-180	0	0.0
0-180	1752	100.0

EFFICACY = 104.9 lm/W
CIE TYPE - DIRECT
PLANE : 0-DEG 90-DEG
SPACING CRITERIA : 0.51 0.51
BEAM ANGLE (50%) : 30.8 X 30.6 DEGREES
FIELD ANGLE (10%) : 72.1 X 72.4 DEGREES
LUMINOUS DIAMETER: 2.500

LUMINANCE DATA IN CANDELA/SQ M			
ANGLE	AVERAGE	AVERAGE	AVERAGE
IN DEG	0-DEG	45-DEG	90-DEG
45	29473.	31706.	31259.
55	0.	0.	0.
65	0.	0.	0.
75	0.	0.	0.
85	0.	0.	0.





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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	4037	4037	4037	4037	4037
2.5	4013	4042	3999	4013	4058
5.0	3876	3950	3909	3939	3942
7.5	3624	3685	3663	3675	3705
10.0	3150	3170	3152	3152	3154
12.5	2593	2563	2562	2544	2541
15.0	2086	2080	2081	2076	2074
17.5	1719	1707	1718	1720	1702
20.0	1438	1411	1420	1426	1401
22.5	1189	1172	1180	1180	1168
25.0	990	981	988	983	984
27.5	839	835	830	832	835
30.0	705	710	698	705	707
32.5	576	582	577	577	584
35.0	455	455	457	453	462
37.5	340	344	341	343	343
40.0	238	240	234	238	238
42.5	147	144	145	146	147
45.0	66	70	71	69	70
47.5	22	24	25	24	23
50.0	8	8	8	9	9
52.5	0	0	0	0	0
55.0	0	0	0	0	0
57.5	0	0	0	0	0
60.0	0	0	0	0	0
62.5	0	0	0	0	0
65.0	0	0	0	0	0
67.5	0	0	0	0	0
70.0	0	0	0	0	0
72.5	0	0	0	0	0
75.0	0	0	0	0	0
77.5	0	0	0	0	0
80.0	0	0	0	0	0
82.5	0	0	0	0	0
85.0	0	0	0	0	0
87.5	0	0	0	0	0
90.0	0	0	0	0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	95
5- 10	256
10- 15	304
15- 20	284
20- 25	248
25- 30	212
30- 35	170
35- 40	114
40- 45	55
45- 50	13
50- 55	1
55- 60	0
60- 65	0
65- 70	0
70- 75	0
75- 80	0
80- 85	0
85- 90	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	351
0- 20	939
0- 30	1399
0- 40	1683
0- 50	1751
0- 60	1752
0- 70	1752
0- 80	1752
0- 90	1752



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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	114	112	109	107	112	110	108	106	106	104	102	102	101	99	98	97	97	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	90
3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	90	88	86	85
4	100	94	89	85	98	92	88	84	90	86	83	88	85	83	87	84	82	80
5	96	89	83	80	94	88	83	79	86	82	79	84	81	78	83	80	77	76
6	92	84	79	75	91	83	78	75	82	78	74	81	77	74	79	76	73	72
7	88	80	75	71	87	79	74	71	78	74	71	77	73	70	76	72	70	69
8	85	76	71	67	84	76	71	67	75	70	67	74	70	67	73	69	67	65
9	81	73	68	64	80	72	67	64	72	67	64	71	67	64	70	66	63	62
10	78	70	65	61	77	69	64	61	69	64	61	68	64	61	67	63	61	60

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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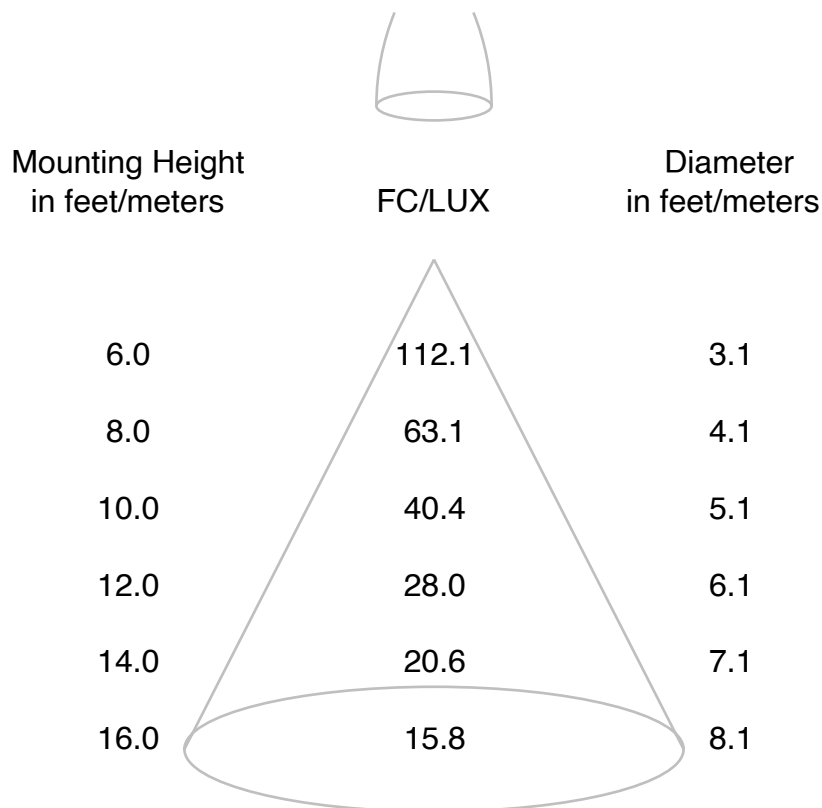
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CONE OF LIGHT DIAGRAM

(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.