

REPORT NUMBER: ITL89998-GONIOPHOTOMETRY

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ISSUE DATE: 11/27/17

PREPARED FOR: LUMOS LIGHTING

ADDRESS: 145 YUMA STREET
DENVER, CO 80223

CATALOG NUMBER: RPM-UP-DN-24

LUMINAIRE: FABRICATED WHITE PAINTED METAL HOUSING WITH INNER AND OUTER CYLINDRICAL SIDES AND 9 UPLIGHT APERTURES, 6 WHITE CIRCUIT BOARDS EACH WITH 18 LEDS MOUNTED ON INNER FACING SURFACE OF OUTER SIDES, 3-PIECE CLEAR FLAT PLASTIC TOP LENS, TRANSLUCENT WHITE PLASTIC BOTTOM LENS. 21" ROUND OPEN CENTER.

LAMPS: ONE HUNDRED EIGHT WHITE LIGHT EMITTING DIODES (LEDS), AIMED AT THE HORIZON.

INPUT ELECTRICAL: 120.0 VOLTS, 35.9 WATTS, 0.300 AMPS

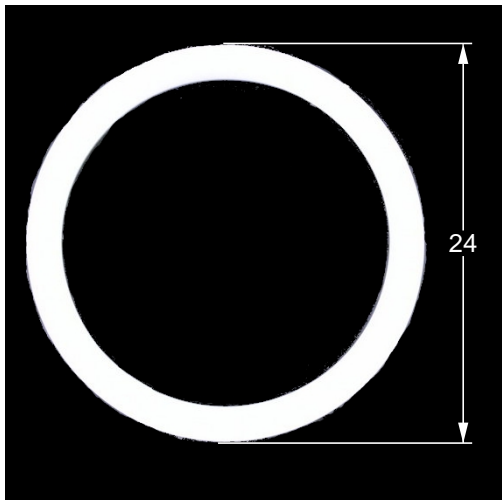
MOUNTING: SUSPENDED

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 600mA 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 = 20.0 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 *N WHITE*

Approved *R BERGIN*
LIGHTING ENGINEER

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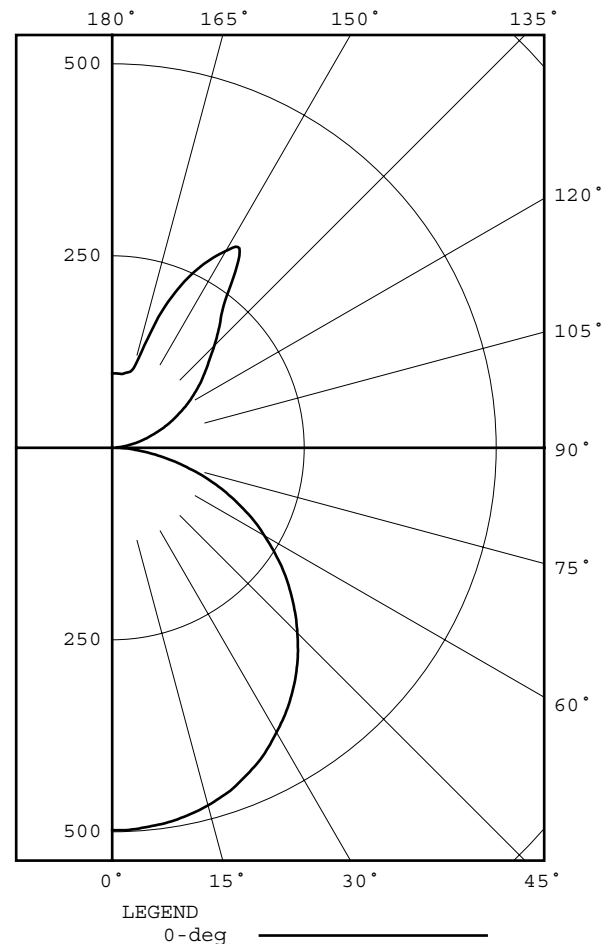
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DEG	CANDELA	LUMENS
0	498	
5	496	47
15	482	136
25	451	208
35	403	252
45	341	263
55	269	240
65	189	187
75	104	111
85	30	35
90	5	
95	9	13
105	44	47
115	88	87
125	136	122
135	188	146
145	279	170
155	253	117
165	107	36
175	97	9
180	97	

ZONAL ZONE	LUMEN LUMENS	SUMMARY %FIXT
0- 30	391	17.6
0- 40	643	28.9
0- 60	1146	51.5
0- 90	1479	66.5
90-120	147	6.6
90-130	268	12.1
90-150	583	26.2
90-180	745	33.5
0-180	2224	100.0

EFFICACY = 61.9 lm/W
 CIE TYPE - SEMI-DIRECT
 SPACING CRITERION: 1.28
 BEAM ANGLE (50%) : 115.0 DEGREES
 FIELD ANGLE (10%) : 163.9 DEGREES





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CANDELA DISTRIBUTION

0.0	498
5.0	496
10.0	491
15.0	482
20.0	469
25.0	451
30.0	428
35.0	403
40.0	374
45.0	341
50.0	306
55.0	269
60.0	229
65.0	189
70.0	147
75.0	104
80.0	64
85.0	30
90.0	5
95.0	9
100.0	25
105.0	44
110.0	65
115.0	88
120.0	112
125.0	136
130.0	160
135.0	188
140.0	220
145.0	279
150.0	296
155.0	253
160.0	189
165.0	107
170.0	99
175.0	97
180.0	97



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	12
5- 10	35
10- 15	58
15- 20	78
20- 25	96
25- 30	111
30- 35	122
35- 40	130
40- 45	132
45- 50	131
50- 55	125
55- 60	115
60- 65	102
65- 70	85
70- 75	66
75- 80	45
80- 85	25
85- 90	10
90- 95	4
95-100	9
100-105	18
105-110	28
110-115	39
115-120	49
120-125	57
125-130	64
130-135	70
135-140	75
140-145	82
145-150	88
150-155	70
155-160	47
160-165	24
165-170	12
170-175	7
175-180	2

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	47
0- 20	183
0- 30	391
0- 40	643
0- 50	906
0- 60	1146
0- 70	1333
0- 80	1444
0- 90	1479
0-100	1492
0-110	1538
0-120	1626
0-130	1747
0-140	1893
0-150	2062
0-160	2179
0-170	2215
0-180	2224



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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	11111111111111	105105105105	92	92	92	81	81	81	71	71	71	66							
1	101	96	92	89	95	91	87	84	81	78	75	71	69	67	62	61	59	55	
2	92	84	77	72	86	79	73	68	70	66	62	62	59	56	54	52	50	46	
3	84	73	66	59	78	69	62	57	62	56	52	55	50	47	48	45	42	38	
4	76	65	57	50	71	61	54	48	55	49	44	48	44	40	43	39	36	33	
5	70	58	49	43	66	55	47	41	49	43	38	43	38	34	38	34	31	28	
6	64	52	43	37	60	49	41	36	44	38	33	39	34	30	35	30	27	24	
7	60	47	38	33	56	44	37	31	40	33	29	36	30	26	32	27	24	22	
8	55	42	34	29	52	40	33	28	36	30	26	33	27	24	29	25	21	19	
9	52	39	31	26	48	37	30	25	33	27	23	30	25	21	27	22	19	17	
10	48	36	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16	

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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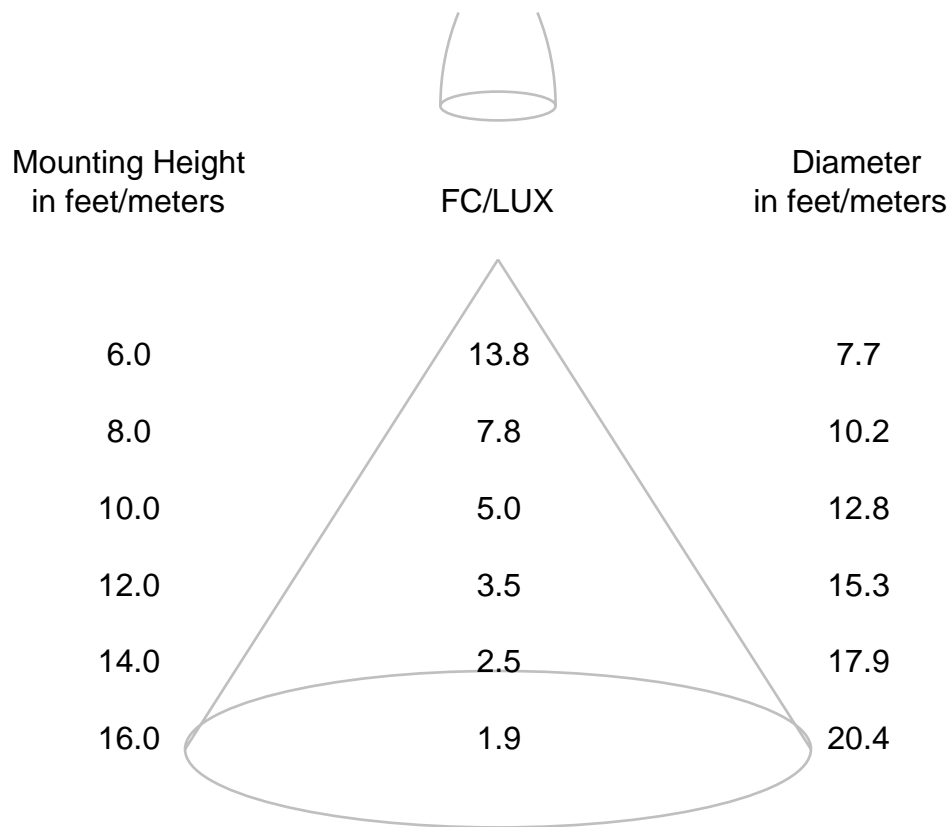
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CONE OF LIGHT DIAGRAM

(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.