

REPORT NUMBER: ITL90059-GONIOPHOTOMETRY

PAGE: 1 OF 6

ISSUE DATE: 12/21/17

PREPARED FOR: LUMOS LIGHTING

ADDRESS: 145 YUMA STREET
DENVER, CO 80223

CATALOG NUMBER: RPM-DN-24

LUMINAIRE: FABRICATED WHITE PAINTED METAL HOUSING WITH INNER AND OUTER CYLINDRICAL SIDES AND 9 UPLIGHT APERTURES, 3-PIECE WHITE PAINTED FLAT METAL REFLECTORS OVER UPLIGHT APERTURES, 6 WHITE CIRCUIT BOARDS EACH WITH 18 LEDS MOUNTED ON INNER FACING SURFACE OF OUTER SIDES, 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, 0.299 AMPS

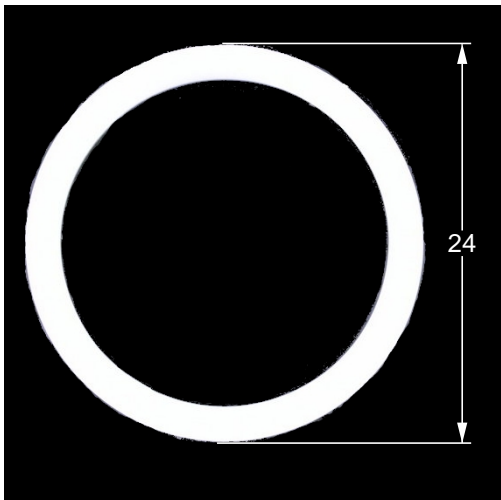
MOUNTING: SUSPENDED

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 *M KLOPF*

Approved *N WHITE*

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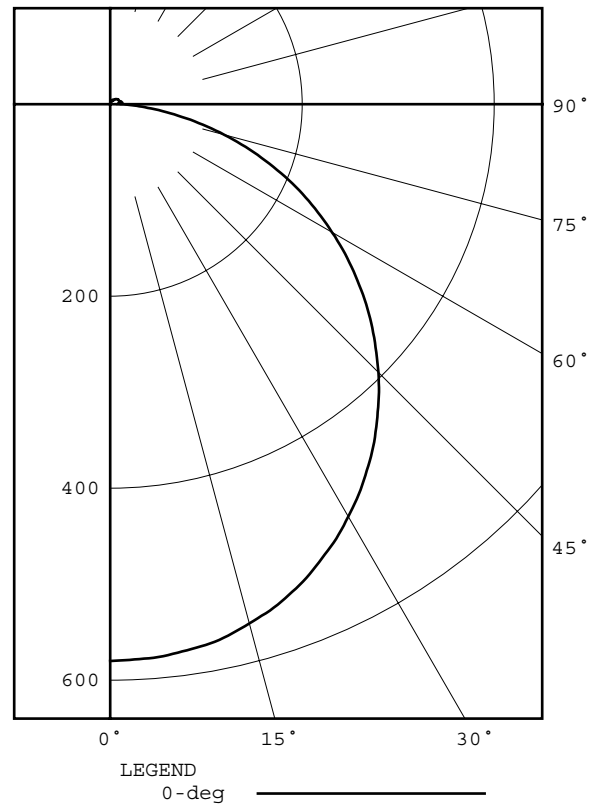
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DEG	CANDELA	LUMENS
0	580	
5	578	55
15	560	158
25	522	241
35	466	292
45	395	305
55	312	279
65	221	218
75	123	130
85	36	43
90	12	
95	8	10
105	11	12
115	10	10
125	9	8
135	7	6
145	5	3
155	3	1
165	2	1
175	1	0
180	0	

ZONAL ZONE	LUMEN LUMENS	SUMMARY %FIXT
0- 30	454	25.6
0- 40	746	42.1
0- 60	1329	75.0
0- 90	1721	97.1
90-120	32	1.8
90-130	40	2.2
90-150	49	2.7
90-180	51	2.9
0-180	1771	100.0

EFFICACY = 49.3 lm/W
 CIE TYPE - DIRECT
 SPACING CRITERION: 1.27
 BEAM ANGLE (50%) : 115.0 DEGREES
 FIELD ANGLE (10%) : 164.3 DEGREES





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CANDELA DISTRIBUTION

0.0	580
5.0	578
10.0	572
15.0	560
20.0	544
25.0	522
30.0	496
35.0	466
40.0	432
45.0	395
50.0	355
55.0	312
60.0	267
65.0	221
70.0	172
75.0	123
80.0	76
85.0	36
90.0	12
95.0	8
100.0	12
105.0	11
110.0	10
115.0	10
120.0	10
125.0	9
130.0	8
135.0	7
140.0	6
145.0	5
150.0	4
155.0	3
160.0	2
165.0	2
170.0	1
175.0	1
180.0	0



INDEPENDENT TESTING LABORATORIES, INC.
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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	14
5- 10	41
10- 15	67
15- 20	91
20- 25	112
25- 30	129
30- 35	142
35- 40	150
40- 45	153
45- 50	151
50- 55	145
55- 60	134
60- 65	119
65- 70	100
70- 75	77
75- 80	53
80- 85	30
85- 90	13
90- 95	5
95-100	5
100-105	6
105-110	5
110-115	5
115-120	5
120-125	4
125-130	4
130-135	3
135-140	3
140-145	2
145-150	1
150-155	1
155-160	1
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	55
0- 20	213
0- 30	454
0- 40	746
0- 50	1050
0- 60	1329
0- 70	1547
0- 80	1678
0- 90	1721
0-100	1731
0-110	1742
0-120	1752
0-130	1760
0-140	1766
0-150	1769
0-160	1771
0-170	1771
0-180	1771



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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	118	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80	80
2	98	89	82	76	95	87	81	75	83	78	73	79	75	71	76	72	69	67	67
3	89	78	70	63	86	76	69	62	73	66	61	70	64	59	67	62	58	56	56
4	81	69	60	53	79	68	59	53	65	57	52	62	56	51	59	54	50	47	47
5	75	62	52	46	72	60	52	45	58	50	45	56	49	44	53	48	43	41	41
6	69	55	46	40	67	54	46	40	52	45	39	50	43	38	48	42	38	36	36
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	34	31	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	28	28
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	37	31	27	25	25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23	23

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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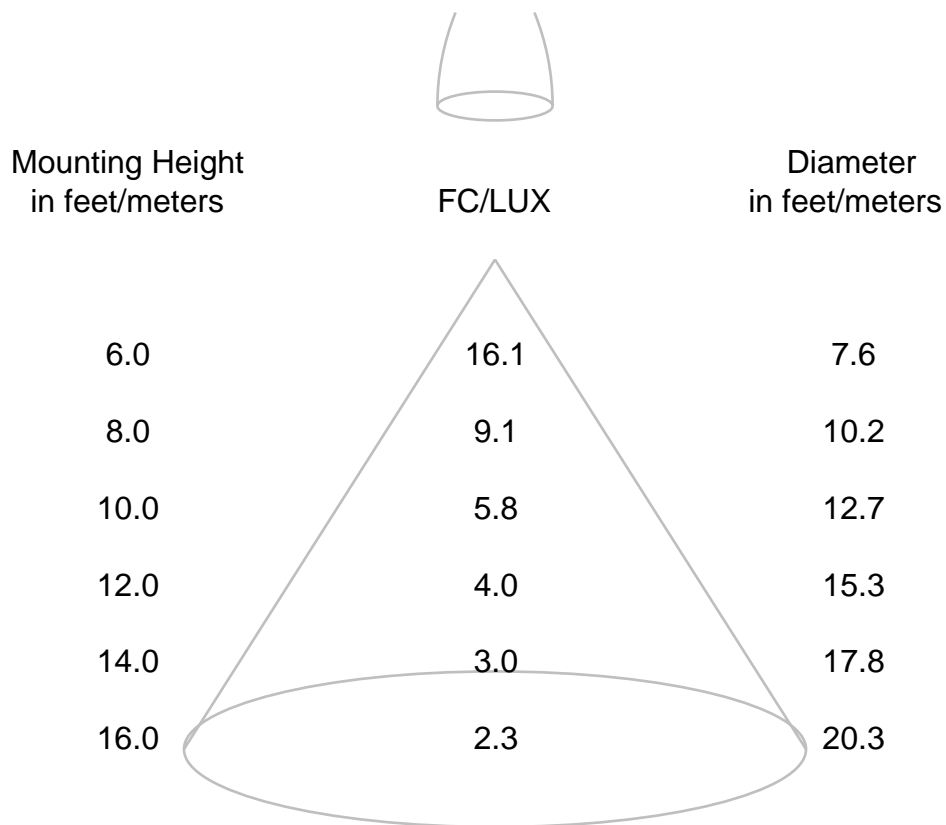
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CONE OF LIGHT DIAGRAM

(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.