

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P645148

Luminaire Tested: OMN4DIP-SR4F0-75D50U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645148
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-75D50U835-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

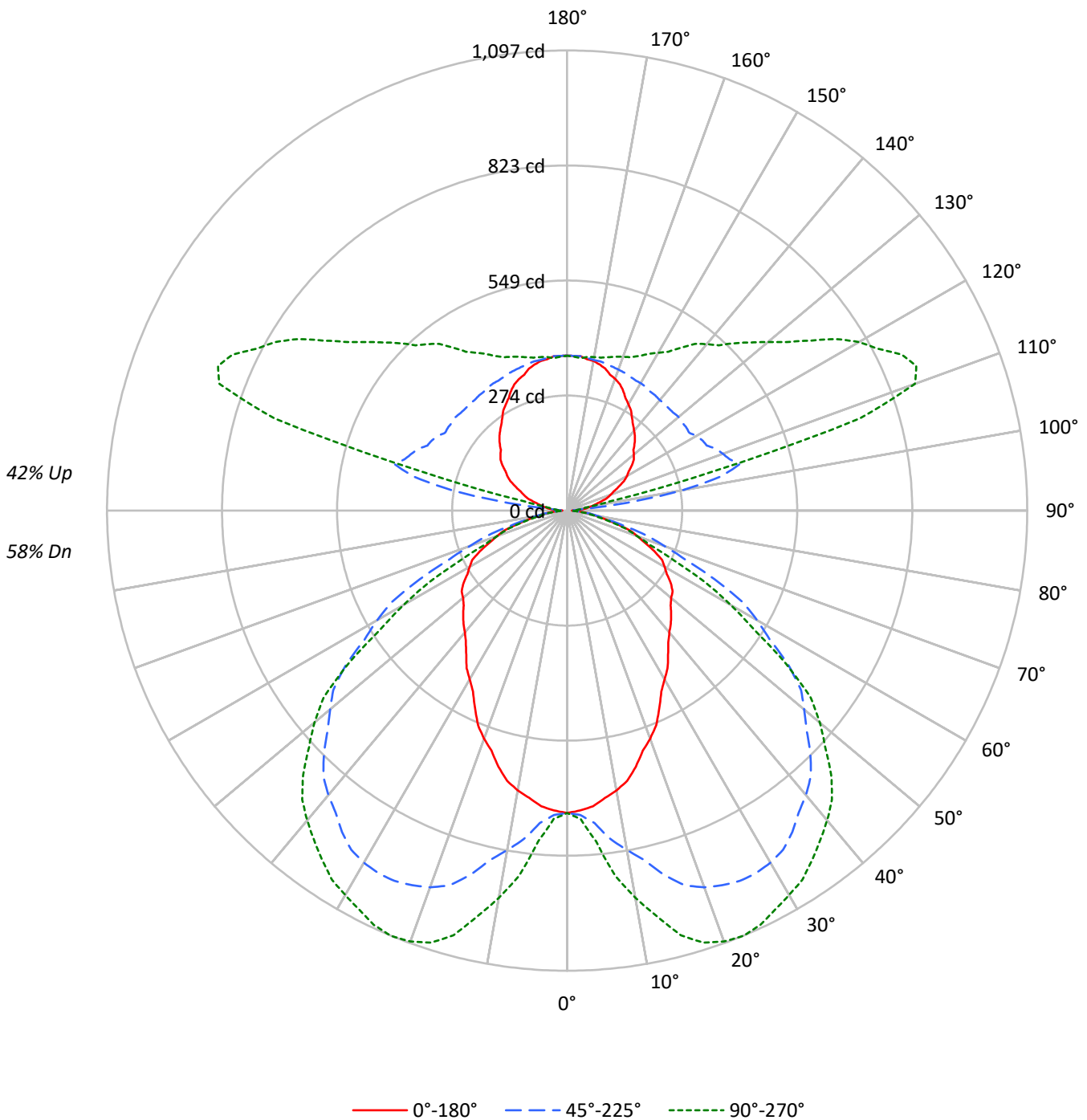
Lumens per Lamp: N/A
Luminaire Lumens: 4772.8 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P645148

CATALOG NUMBER: OMN4DIP-SR4F0-75D50U835-CLBOOB-1DUDD-WW

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									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	50	30	10	50	30	10	0														
RCR																																						
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58																				
1	100	95	91	88	93	89	86	83	77	75	72	66	65	63	56	55	54	49																				
2	91	83	77	72	84	78	72	68	68	64	60	58	55	52	50	47	45	41																				
3	83	73	66	60	77	68	62	57	60	54	50	51	47	44	44	41	38	35																				
4	76	65	57	50	70	60	53	48	53	47	43	46	41	38	39	36	33	30																				
5	69	57	49	43	64	54	46	41	47	41	37	41	36	32	35	31	28	25																				
6	64	51	43	37	59	48	41	35	42	36	32	37	32	28	31	28	25	22																				
7	59	46	38	32	55	43	36	31	38	32	28	33	28	25	29	25	22	19																				
8	55	42	34	29	51	39	32	27	35	29	25	30	26	22	26	22	19	17																				
9	51	38	31	25	47	36	29	24	32	26	22	28	23	20	24	20	17	15																				
10	47	35	28	23	44	33	26	22	29	24	20	26	21	18	22	18	16	14																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11641	11641	11641
5°	11468	12122	12828
10°	11106	13472	15369
15°	10567	15052	17518
20°	9940	16423	18785
25°	9260	17355	19417
30°	8660	18069	19727
35°	8263	18443	20061
40°	7988	18661	20322
45°	8003	18724	20331
50°	8128	18532	19753
55°	8495	18173	17937
60°	8664	16895	14567
65°	8776	14800	10697
70°	8389	11637	8313
75°	7530	8684	7006
80°	6397	6862	5616
85°	6206	5595	4668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 20331 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	1.5
10°-20°	245.8	5.1
20°-30°	408.3	8.6
30°-40°	515.0	10.8
40°-50°	550.6	11.5
50°-60°	485.9	10.2
60°-70°	311.9	6.5
70°-80°	138.3	2.9
80°-90°	36.7	0.8
90°-100°	54.8	1.1
100°-110°	329.5	6.9
110°-120°	443.7	9.3
120°-130°	360.3	7.5
130°-140°	287.8	6.0
140°-150°	226.6	4.7
150°-160°	165.7	3.5
160°-170°	102.9	2.2
170°-180°	35.1	0.7
0°-30°	728.0	15.3
0°-40°	1243.0	26.0
0°-60°	2279.5	47.8
0°-90°	2766.4	58.0
90°-120°	828.0	17.3
90°-150°	1702.8	35.7
90°-180°	2006.0	42.0
0°-180°	4772.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	708	729	748	773	792	66
15°	632	729	900	1009	1048	177
25°	520	705	974	1065	1090	239
35°	419	644	936	996	1018	263
45°	350	550	820	871	890	271
55°	302	433	646	649	637	268
65°	230	290	387	314	280	225
75°	121	134	139	119	112	129
85°	34	29	30	27	25	35
90°	12	14	15	17	14	9
95°	37	46	27	26	29	34
105°	84	121	425	538	355	89
115°	136	162	367	754	880	135
125°	188	213	346	598	706	168
135°	228	252	344	492	564	176
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	721.0	721.0	721.0	721.0	721.0
2.5°	715.7	726.2	726.4	730.6	735.8
5°	707.6	728.9	747.9	773.4	791.5
7.5°	690.9	728.9	789.5	848.8	878.3
10°	677.4	729.9	821.7	901.3	937.4
12.5°	660.0	729.5	853.8	949.7	991.0
15°	632.2	728.9	900.5	1008.7	1048.0
17.5°	600.0	725.9	937.0	1045.5	1079.9
20°	578.5	722.8	955.8	1058.9	1093.3
22.5°	554.4	715.7	966.5	1065.5	1097.3
25°	519.8	705.1	974.2	1065.4	1089.9
27.5°	485.9	689.9	974.6	1051.9	1072.8
30°	464.5	677.6	969.2	1038.4	1058.1
32.5°	445.7	664.1	958.5	1022.3	1043.3
35°	419.2	643.8	935.7	996.5	1017.8
37.5°	396.4	620.7	906.8	966.1	991.0
40°	379.0	601.9	885.4	944.5	964.2
42.5°	365.6	582.0	859.9	917.6	934.7
45°	350.5	550.5	820.0	870.7	890.4
47.5°	334.4	518.0	774.0	821.9	834.7
50°	323.6	494.1	737.8	781.5	786.4
52.5°	316.9	469.1	702.9	730.5	731.4
55°	301.8	433.0	645.6	648.7	637.2
57.5°	281.7	390.9	572.8	556.4	528.9
60°	268.3	361.8	523.2	490.4	451.1
62.5°	254.9	333.9	470.9	417.8	371.9
65°	229.7	290.4	387.4	314.5	280.0
67.5°	200.6	242.5	304.2	235.2	212.3
70°	177.7	210.5	246.5	192.5	176.1
72.5°	156.3	178.6	199.5	159.1	150.6
75°	120.7	133.8	139.2	118.9	112.3
77.5°	88.9	89.5	96.6	83.8	80.5
80°	68.8	65.5	73.8	63.6	60.4
82.5°	52.7	48.1	53.7	46.2	44.3
85°	33.5	28.6	30.2	26.8	25.2
87.5°	19.8	16.3	16.4	15.4	13.5
90°	11.7	14.0	14.7	17.0	13.7
92.5°	21.3	19.7	18.9	21.7	20.3
95°	37.0	46.4	27.0	26.0	28.9
97.5°	49.4	77.6	142.9	43.6	36.5
100°	59.2	92.9	279.0	84.0	55.1
102.5°	69.0	105.8	375.6	214.8	116.9
105°	83.7	120.7	425.3	538.5	355.3
107.5°	100.1	126.2	406.3	783.0	731.9
110°	109.9	135.5	395.1	822.7	882.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	121.1	146.7	384.0	799.5	900.9
115°	136.1	161.7	367.3	754.5	880.0
117.5°	152.9	178.4	363.1	705.9	835.0
120°	164.6	189.6	355.7	668.8	803.4
122.5°	173.9	199.4	345.0	637.0	760.7
125°	188.5	213.4	346.4	598.5	705.9
127.5°	200.3	227.0	345.1	553.6	659.9
130°	207.7	234.9	347.0	522.4	624.6
132.5°	214.3	241.5	344.3	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2

(END OF REPORT)