

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: P644514

Luminaire Tested: OMN4DIP-SR4F0-100D125U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644514  
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-SR4F0-100D125U830-CLBOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

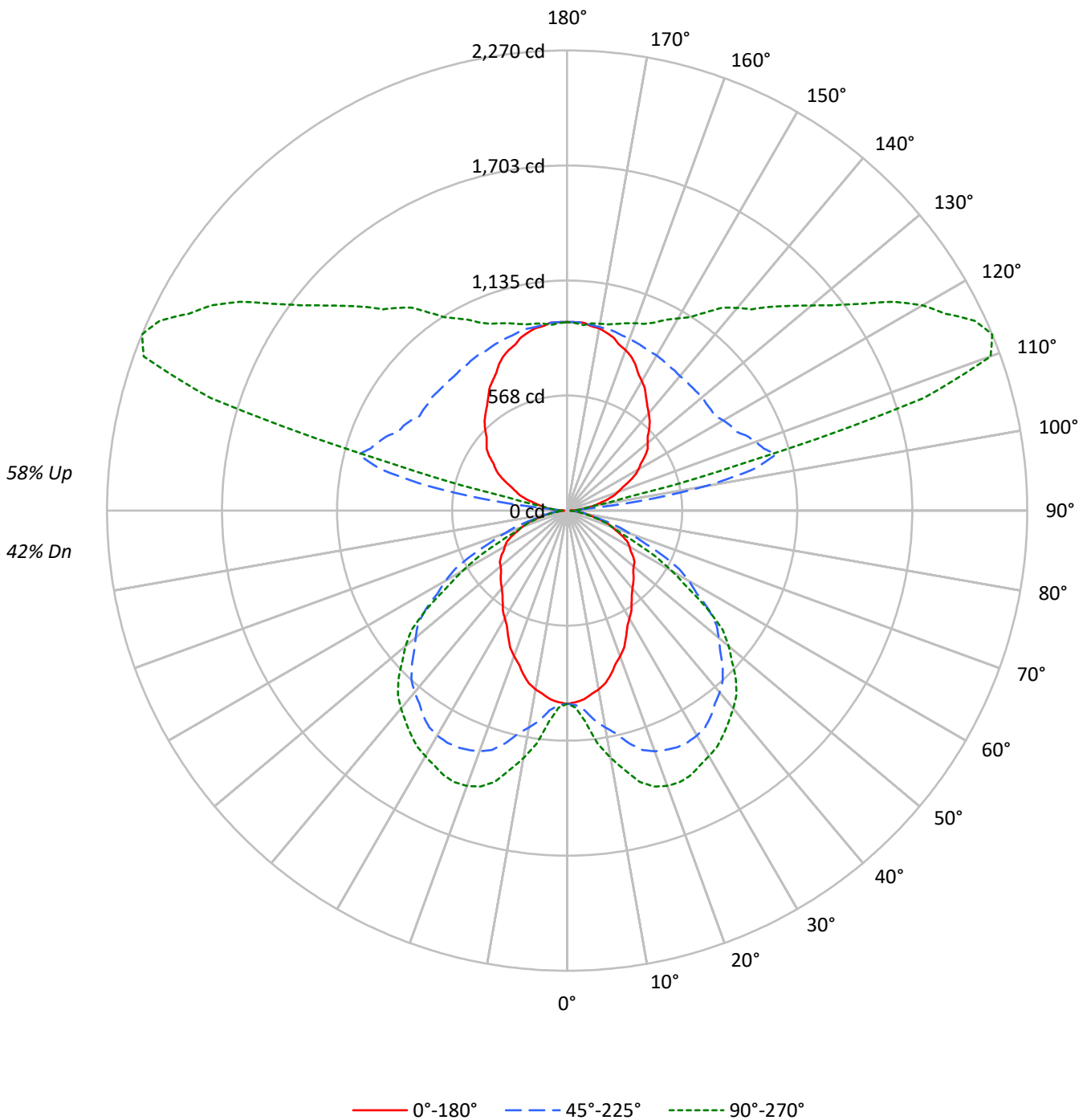
Lumens per Lamp: N/A  
Luminaire Lumens: 8685.4 lumens  
Efficiency: N/A  
Efficacy: 127.5 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 68.1  
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: P644514

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U830-CLBOOB-1DUDD-WW

### Luminous Intensity Polar Plot





TEST NUMBER: P644514

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U830-CLBOOB-1DUDD-WW

**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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42																				
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	36																				
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30																				
3	80	70	63	57	72	65	58	53	53	49	45	43	40	37	34	31	30	25																				
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25	21																				
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	18																				
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16																				
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14																				
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	12																				
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	16	13	11																				
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10																				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15389	15389	15389
5°	15161	16023	16956
10°	14682	17807	20315
15°	13969	19896	23158
20°	13139	21710	24831
25°	12241	22942	25668
30°	11447	23886	26077
35°	10924	24380	26520
40°	10560	24668	26863
45°	10579	24749	26875
50°	10746	24498	26113
55°	11232	24023	23710
60°	11454	22333	19256
65°	11603	19561	14143
70°	11094	15380	10985
75°	9956	11478	9264
80°	8452	9066	7420
85°	8207	7392	6150

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 26875 cd/sqm



TEST NUMBER: P644514

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U830-CLBOOB-1DUDD-WW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.7	1.1
10°-20°	324.9	3.7
20°-30°	539.7	6.2
30°-40°	680.8	7.8
40°-50°	727.8	8.4
50°-60°	642.4	7.4
60°-70°	412.3	4.7
70°-80°	182.8	2.1
80°-90°	49.5	0.6
90°-100°	126.8	1.5
100°-110°	823.0	9.5
110°-120°	1112.5	12.8
120°-130°	904.4	10.4
130°-140°	724.7	8.3
140°-150°	571.0	6.6
150°-160°	417.5	4.8
160°-170°	259.3	3.0
170°-180°	88.4	1.0
0°-30°	962.3	11.1
0°-40°	1643.1	18.9
0°-60°	3013.3	34.7
0°-90°	3657.8	42.1
90°-120°	2062.3	23.7
90°-150°	4262.4	49.1
90°-180°	5028.0	57.9
0°-180°	8685.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	953	953	953	953	953	
5°	935	964	989	1022	1046	88
15°	836	964	1190	1333	1385	234
25°	687	932	1288	1408	1441	316
35°	554	851	1237	1317	1346	348
45°	463	728	1084	1151	1177	358
55°	399	572	853	858	842	354
65°	304	384	512	416	370	297
75°	160	177	184	157	148	170
85°	44	38	40	35	33	47
90°	16	21	25	31	26	13
95°	71	103	58	60	69	70
105°	197	292	1066	1355	895	209
115°	333	399	919	1899	2217	331
125°	469	532	867	1506	1778	417
135°	573	636	866	1239	1422	442
145°	679	736	872	1079	1194	426
155°	796	824	889	978	1024	365
165°	883	895	913	936	954	248
175°	930	936	930	924	918	88
180°	930	930	930	930	930	



TEST NUMBER: P644514

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U830-CLBOOB-1DUDD-WW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	953.1	953.1	953.1	953.1	953.1
2.5°	946.0	959.9	960.2	965.7	972.6
5°	935.4	963.6	988.6	1022.4	1046.2
7.5°	913.2	963.5	1043.6	1122.0	1161.1
10°	895.5	964.9	1086.1	1191.4	1239.1
12.5°	872.5	964.4	1128.7	1255.4	1310.0
15°	835.7	963.5	1190.3	1333.4	1385.4
17.5°	793.1	959.6	1238.6	1382.0	1427.5
20°	764.7	955.5	1263.5	1399.7	1445.2
22.5°	732.8	946.1	1277.6	1408.5	1450.5
25°	687.1	932.1	1287.8	1408.3	1440.8
27.5°	642.4	912.0	1288.3	1390.4	1418.2
30°	614.0	895.8	1281.2	1372.7	1398.7
32.5°	589.2	877.9	1267.0	1351.4	1379.2
35°	554.2	851.1	1236.9	1317.3	1345.5
37.5°	524.0	820.5	1198.7	1277.1	1310.0
40°	501.0	795.7	1170.4	1248.5	1274.5
42.5°	483.2	769.3	1136.7	1213.0	1235.5
45°	463.3	727.7	1083.9	1151.0	1177.0
47.5°	442.0	684.7	1023.2	1086.5	1103.4
50°	427.8	653.2	975.3	1033.1	1039.6
52.5°	418.9	620.1	929.2	965.6	966.9
55°	399.0	572.4	853.4	857.5	842.3
57.5°	372.4	516.7	757.2	735.5	699.1
60°	354.7	478.2	691.6	648.3	596.3
62.5°	336.9	441.4	622.4	552.3	491.6
65°	303.7	383.9	512.0	415.7	370.2
67.5°	265.1	320.6	402.1	311.0	280.6
70°	235.0	278.3	325.8	254.4	232.7
72.5°	206.6	236.1	263.8	210.3	199.1
75°	159.6	176.9	184.0	157.2	148.5
77.5°	117.5	118.3	127.7	110.7	106.4
80°	90.9	86.5	97.5	84.1	79.8
82.5°	69.6	63.5	70.9	61.1	58.5
85°	44.3	37.8	39.9	35.4	33.2
87.5°	26.2	22.1	22.7	22.1	19.5
90°	15.5	21.2	25.0	30.8	26.4
92.5°	34.9	35.4	37.3	46.0	46.3
95°	71.2	102.6	57.9	59.5	68.8
97.5°	104.8	181.8	352.4	105.9	90.0
100°	131.1	221.9	697.0	207.6	136.8
102.5°	157.4	254.5	940.4	538.8	294.1
105°	196.9	292.0	1065.6	1354.9	895.1
107.5°	238.6	307.9	1017.6	1970.9	1844.0
110°	264.9	331.3	989.5	2070.9	2223.2



TEST NUMBER: P644514

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U830-CLBOOB-1DUDD-WW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	292.9	359.4	961.4	2012.4	2270.0
115°	332.9	399.3	919.3	1899.1	2217.3
117.5°	375.7	441.5	908.8	1776.5	2103.8
120°	406.7	469.6	890.1	1683.2	2024.2
122.5°	430.1	495.9	864.9	1603.0	1916.6
125°	468.8	531.8	866.7	1506.1	1778.5
127.5°	500.5	566.4	865.6	1393.3	1662.7
130°	519.3	587.9	870.3	1316.3	1573.8
132.5°	539.1	607.8	866.7	1282.5	1494.2
135°	573.3	636.3	865.9	1238.6	1421.7
137.5°	602.6	670.1	865.9	1190.0	1346.8
140°	626.0	688.9	865.9	1161.6	1304.6
142.5°	649.4	707.7	870.5	1128.7	1262.5
145°	678.6	735.9	871.7	1079.1	1193.5
147.5°	713.8	764.1	878.7	1043.4	1131.5
150°	737.2	782.9	883.4	1019.7	1094.0
152.5°	760.6	801.7	883.4	1000.6	1061.3
155°	795.7	824.3	889.3	978.1	1023.8
157.5°	823.7	851.2	896.3	963.7	996.9
160°	842.5	865.3	901.0	954.3	982.9
162.5°	856.5	879.4	905.6	949.4	968.8
165°	883.4	894.9	912.7	936.5	953.6
167.5°	898.6	908.9	918.5	930.4	940.7
170°	912.7	918.4	918.5	930.3	936.1
172.5°	917.3	927.6	923.2	925.7	931.4
175°	930.2	935.9	930.2	924.2	918.5
177.5°	930.2	934.8	930.2	930.1	925.5
180°	930.2	930.2	930.2	930.2	930.2

(END OF REPORT)