

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: P644668

Luminaire Tested: OMN4DIP-SR4F0-125D100U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644668  
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-SR4F0-125D100U835-CLBOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

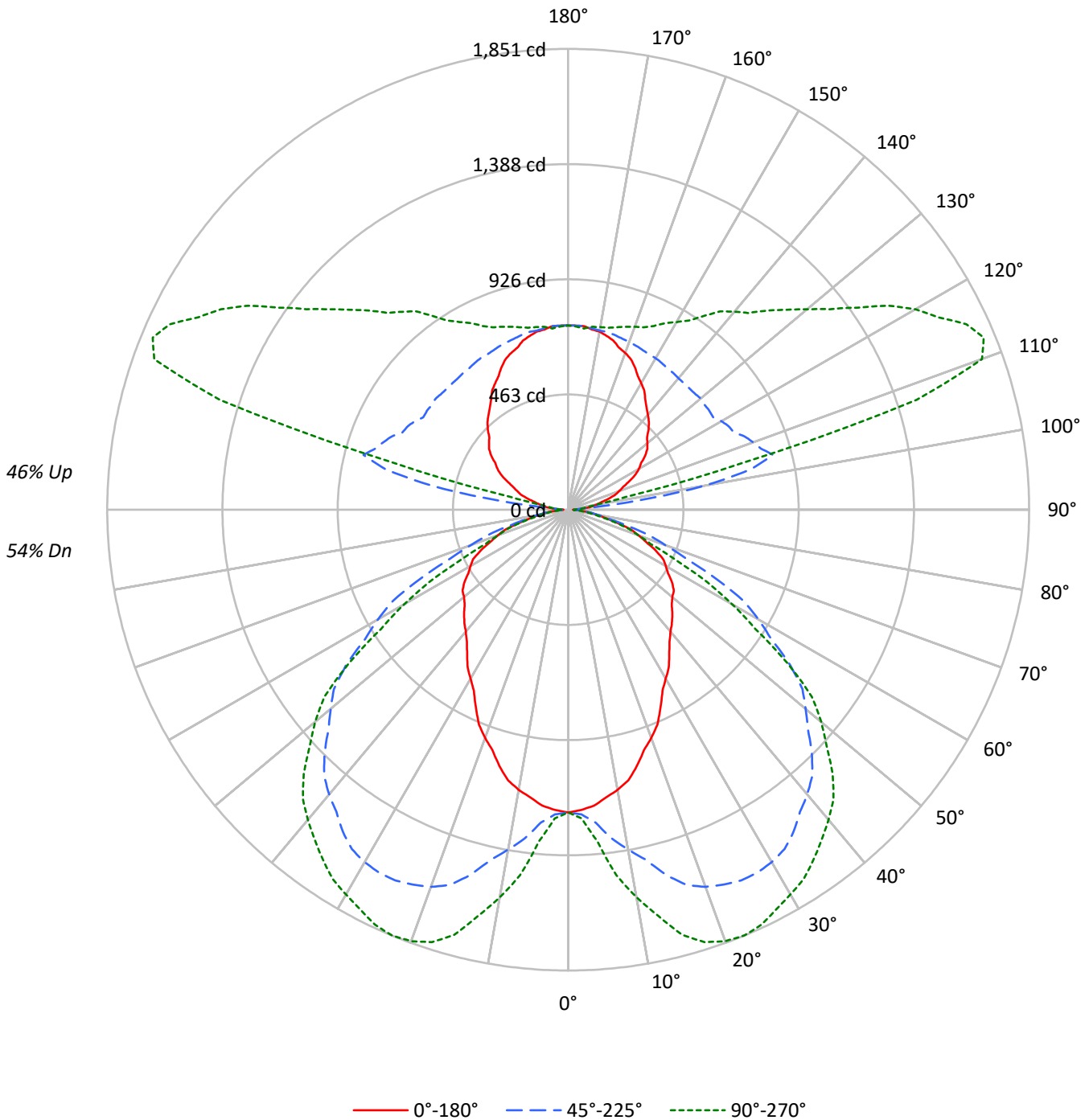
Lumens per Lamp: N/A  
Luminaire Lumens: 8680.2 lumens  
Efficiency: N/A  
Efficacy: 125.8 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 69  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P644668

CATALOG NUMBER: OMN4DIP-SR4F0-125D100U835-CLBOOB-1DUDD-WW

### Luminous Intensity Polar Plot





TEST NUMBER: P644668

CATALOG NUMBER: OMN4DIP-SR4F0-125D100U835-CLBOOB-1DUDD-WW

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					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	0	
RCR																						
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54				
1	99	94	91	87	91	88	84	81	75	73	70	64	62	60	53	52	51	46				
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	44	43	38				
3	82	72	65	59	76	67	61	56	58	53	49	49	45	42	41	38	36	32				
4	75	64	56	50	69	60	52	47	51	46	41	44	39	36	37	33	31	27				
5	69	57	49	42	63	53	46	40	46	40	36	39	35	31	33	29	27	24				
6	63	51	43	37	58	47	40	35	41	35	31	35	31	27	30	26	23	20				
7	58	46	38	32	54	43	35	30	37	31	27	32	27	24	27	23	21	18				
8	54	41	34	28	50	39	32	27	34	28	24	29	24	21	25	21	18	16				
9	50	38	30	25	46	35	28	24	31	25	21	27	22	19	23	19	16	14				
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	21	17	15	13				

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

	0°	45°	90°
0°	19635	19635	19635
5°	19344	20443	21635
10°	18733	22720	25919
15°	17822	25386	29546
20°	16765	27697	31682
25°	15618	29272	32749
30°	14605	30477	33271
35°	13935	31105	33837
40°	13472	31474	34275
45°	13497	31579	34289
50°	13710	31257	33317
55°	14331	30649	30252
60°	14612	28494	24568
65°	14804	24959	18044
70°	14153	19624	14021
75°	12701	14641	11822
80°	10786	11567	9465
85°	10485	9429	7855

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 34289 cd/sqm



TEST NUMBER: P644668

CATALOG NUMBER: OMN4DIP-SR4F0-125D100U835-CLBOOB-1DUDD-WW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.7	1.4
10°-20°	414.5	4.8
20°-30°	688.6	7.9
30°-40°	868.7	10.0
40°-50°	928.6	10.7
50°-60°	819.6	9.4
60°-70°	526.0	6.1
70°-80°	233.3	2.7
80°-90°	62.1	0.7
90°-100°	106.9	1.2
100°-110°	658.5	7.6
110°-120°	887.9	10.2
120°-130°	721.3	8.3
130°-140°	576.7	6.6
140°-150°	454.2	5.2
150°-160°	332.1	3.8
160°-170°	206.3	2.4
170°-180°	70.3	0.8
0°-30°	1227.8	14.1
0°-40°	2096.4	24.2
0°-60°	3844.6	44.3
0°-90°	4665.9	53.8
90°-120°	1653.3	19.0
90°-150°	3405.5	39.2
90°-180°	4014.0	46.2
0°-180°	8680.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1194	1229	1261	1304	1335	112
15°	1066	1229	1519	1701	1768	299
25°	877	1189	1643	1797	1838	403
35°	707	1086	1578	1681	1717	444
45°	591	928	1383	1469	1502	457
55°	509	730	1089	1094	1075	452
65°	388	490	653	530	472	379
75°	204	226	235	200	190	217
85°	57	48	51	45	42	60
90°	20	24	26	31	25	15
95°	68	89	51	50	57	65
105°	164	239	851	1079	712	174
115°	270	322	734	1512	1764	269
125°	376	426	693	1199	1415	334
135°	456	506	689	985	1131	352
145°	540	585	693	858	949	339
155°	633	656	707	778	814	291
165°	703	712	726	745	759	197
175°	740	744	740	735	731	70
180°	740	740	740	740	740	



TEST NUMBER: P644668

CATALOG NUMBER: OMN4DIP-SR4F0-125D100U835-CLBOOB-1DUDD-WW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1216.1	1216.1	1216.1	1216.1	1216.1
2.5°	1207.0	1224.7	1225.1	1232.1	1241.0
5°	1193.5	1229.4	1261.3	1304.5	1334.9
7.5°	1165.2	1229.3	1331.5	1431.6	1481.4
10°	1142.6	1231.1	1385.8	1520.1	1580.9
12.5°	1113.2	1230.4	1440.1	1601.7	1671.4
15°	1066.2	1229.4	1518.7	1701.2	1767.6
17.5°	1011.9	1224.3	1580.4	1763.2	1821.3
20°	975.7	1219.0	1612.0	1785.9	1843.9
22.5°	935.0	1207.1	1630.1	1797.1	1850.7
25°	876.7	1189.2	1643.1	1796.8	1838.3
27.5°	819.6	1163.6	1643.7	1774.0	1809.4
30°	783.4	1142.9	1634.7	1751.4	1784.6
32.5°	751.7	1120.1	1616.6	1724.3	1759.7
35°	707.0	1085.9	1578.1	1680.7	1716.7
37.5°	668.6	1046.9	1529.5	1629.4	1671.4
40°	639.2	1015.2	1493.3	1593.0	1626.2
42.5°	616.5	981.5	1450.3	1547.6	1576.4
45°	591.1	928.4	1383.0	1468.6	1501.7
47.5°	563.9	873.6	1305.5	1386.3	1407.8
50°	545.8	833.4	1244.4	1318.1	1326.4
52.5°	534.5	791.1	1185.6	1232.0	1233.6
55°	509.1	730.3	1088.8	1094.0	1074.7
57.5°	475.1	659.3	966.1	938.4	892.0
60°	452.5	610.1	882.4	827.1	760.8
62.5°	429.9	563.2	794.1	704.7	627.3
65°	387.5	489.8	653.3	530.4	472.3
67.5°	338.2	409.0	513.0	396.8	358.0
70°	299.8	355.1	415.7	324.6	297.0
72.5°	263.6	301.2	336.5	268.3	254.0
75°	203.6	225.7	234.7	200.5	189.5
77.5°	149.9	151.0	162.9	141.3	135.8
80°	116.0	110.4	124.4	107.3	101.8
82.5°	88.8	81.1	90.5	78.0	74.7
85°	56.6	48.3	50.9	45.2	42.4
87.5°	33.4	27.6	27.9	26.5	23.2
90°	19.8	24.3	26.3	30.8	25.3
92.5°	37.8	35.7	35.2	41.3	39.4
95°	68.3	89.1	51.4	50.5	56.9
97.5°	93.8	151.9	284.4	86.3	72.6
100°	113.9	182.9	557.7	167.2	109.9
102.5°	134.0	208.9	751.3	429.9	234.2
105°	164.1	238.7	850.9	1078.9	712.1
107.5°	197.0	250.3	812.7	1568.9	1466.9
110°	217.1	268.9	790.4	1648.4	1768.5



TEST NUMBER: P644668

CATALOG NUMBER: OMN4DIP-SR4F0-125D100U835-CLBOOB-1DUDD-WW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	291.3	768.0	1601.9	1805.8
115°	270.1	322.0	734.5	1511.8	1763.9
117.5°	304.0	355.5	726.1	1414.2	1673.6
120°	327.8	377.8	711.2	1340.0	1610.3
122.5°	346.4	397.9	690.4	1276.2	1524.7
125°	376.2	426.2	692.6	1199.2	1414.8
127.5°	400.3	453.5	690.7	1109.2	1322.7
130°	415.2	469.8	694.5	1047.2	1251.9
132.5°	429.3	483.9	689.9	1020.3	1188.6
135°	456.1	506.2	688.8	985.3	1130.9
137.5°	479.4	533.1	688.8	946.7	1071.4
140°	498.0	548.0	688.8	924.1	1037.8
142.5°	516.6	563.0	692.5	897.9	1004.3
145°	539.9	585.4	693.4	858.4	949.4
147.5°	567.8	607.8	699.0	830.0	900.1
150°	586.4	622.8	702.8	811.1	870.3
152.5°	605.0	637.8	702.8	796.0	844.2
155°	632.9	655.7	707.4	778.0	814.5
157.5°	655.3	677.1	713.0	766.7	793.0
160°	670.2	688.4	716.7	759.1	781.9
162.5°	681.3	699.6	720.4	755.2	770.7
165°	702.8	711.9	726.0	745.0	758.6
167.5°	714.9	723.0	730.7	740.2	748.4
170°	726.0	730.6	730.7	740.1	744.6
172.5°	729.8	737.9	734.4	736.4	740.9
175°	740.0	744.5	740.0	735.2	730.7
177.5°	740.0	743.6	740.0	739.9	736.3
180°	740.0	740.0	740.0	740.0	740.0

(END OF REPORT)