

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: P644664

Luminaire Tested: OMN4DIP-SR4F0-125D100U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644664  
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-SR4F0-125D100U830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

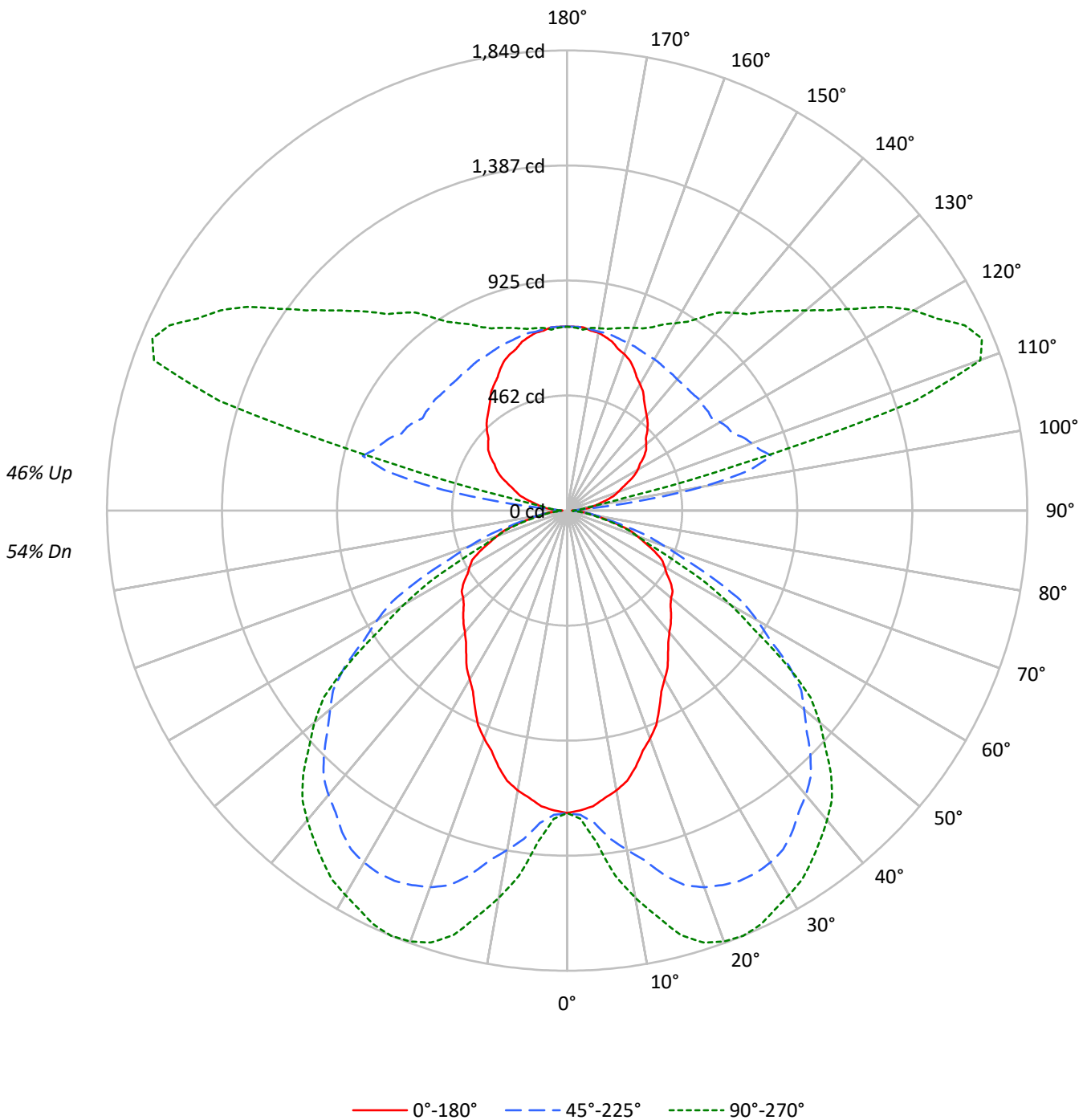
Lumens per Lamp: N/A  
Luminaire Lumens: 8672.4 lumens  
Efficiency: N/A  
Efficacy: 125.7 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse

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

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### Luminous Intensity Polar Plot





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**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°	19617	19617	19617
5°	19326	20425	21616
10°	18715	22699	25896
15°	17805	25362	29519
20°	16749	27673	31654
25°	15604	29247	32719
30°	14592	30449	33240
35°	13923	31077	33805
40°	13460	31445	34244
45°	13483	31549	34260
50°	13697	31230	33287
55°	14317	30621	30224
60°	14599	28468	24545
65°	14789	24936	18029
70°	14139	19610	14006
75°	12689	14629	11809
80°	10767	11557	9456
85°	10467	9429	7855

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 34260 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.6	1.4
10°-20°	414.1	4.8
20°-30°	688.0	7.9
30°-40°	867.9	10.0
40°-50°	927.7	10.7
50°-60°	818.8	9.4
60°-70°	525.5	6.1
70°-80°	233.0	2.7
80°-90°	62.1	0.7
90°-100°	106.8	1.2
100°-110°	657.9	7.6
110°-120°	887.1	10.2
120°-130°	720.6	8.3
130°-140°	576.1	6.6
140°-150°	453.8	5.2
150°-160°	331.8	3.8
160°-170°	206.1	2.4
170°-180°	70.3	0.8
0°-30°	1226.7	14.1
0°-40°	2094.5	24.2
0°-60°	3841.1	44.3
0°-90°	4661.7	53.8
90°-120°	1651.8	19.0
90°-150°	3402.4	39.2
90°-180°	4011.0	46.3
0°-180°	8672.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1215	1215	1215	1215	1215	
5°	1192	1228	1260	1303	1334	112
15°	1065	1228	1517	1700	1766	298
25°	876	1188	1642	1795	1837	403
35°	706	1085	1577	1679	1715	444
45°	590	928	1382	1467	1500	456
55°	509	730	1088	1093	1074	451
65°	387	489	653	530	472	379
75°	203	226	234	200	189	217
85°	56	48	51	45	42	60
90°	20	24	26	31	25	15
95°	68	89	51	50	57	65
105°	164	238	850	1078	711	174
115°	270	322	734	1510	1762	269
125°	376	426	692	1198	1414	334
135°	456	506	688	984	1130	351
145°	539	585	693	858	949	339
155°	632	655	707	777	814	290
165°	702	711	725	744	758	197
175°	739	744	739	735	730	70
180°	739	739	739	739	739	



TEST NUMBER: P644664

CATALOG NUMBER: OMN4DIP-SR4F0-125D100U830-CLBOOB-1DUDD-WW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1215.0	1215.0	1215.0	1215.0	1215.0
2.5°	1206.0	1223.6	1224.0	1231.0	1239.9
5°	1192.4	1228.3	1260.2	1303.3	1333.7
7.5°	1164.1	1228.2	1330.3	1430.3	1480.0
10°	1141.5	1229.9	1384.5	1518.7	1579.5
12.5°	1112.1	1229.3	1438.8	1600.3	1669.9
15°	1065.2	1228.2	1517.3	1699.7	1766.0
17.5°	1011.0	1223.2	1578.9	1761.7	1819.7
20°	974.8	1218.0	1610.6	1784.3	1842.3
22.5°	934.1	1206.0	1628.7	1795.5	1849.1
25°	875.9	1188.1	1641.7	1795.2	1836.6
27.5°	818.9	1162.5	1642.2	1772.4	1807.8
30°	782.7	1141.8	1633.2	1749.8	1782.9
32.5°	751.0	1119.0	1615.1	1722.7	1758.1
35°	706.4	1084.9	1576.7	1679.2	1715.1
37.5°	668.0	1045.9	1528.1	1627.9	1669.9
40°	638.6	1014.3	1491.9	1591.6	1624.7
42.5°	616.0	980.7	1449.0	1546.2	1575.0
45°	590.5	927.6	1381.7	1467.2	1500.4
47.5°	563.4	872.9	1304.3	1385.0	1406.6
50°	545.3	832.7	1243.3	1316.9	1325.2
52.5°	534.0	790.4	1184.5	1230.9	1232.5
55°	508.6	729.6	1087.8	1093.1	1073.7
57.5°	474.7	658.7	965.2	937.6	891.2
60°	452.1	609.6	881.6	826.4	760.1
62.5°	429.5	562.7	793.4	704.1	626.7
65°	387.1	489.3	652.7	529.9	471.9
67.5°	337.9	408.7	512.6	396.4	357.7
70°	299.5	354.8	415.4	324.3	296.7
72.5°	263.3	300.9	336.2	268.1	253.7
75°	203.4	225.5	234.5	200.4	189.3
77.5°	149.8	150.9	162.8	141.2	135.6
80°	115.8	110.3	124.3	107.2	101.7
82.5°	88.7	81.0	90.4	77.9	74.6
85°	56.5	48.2	50.9	45.1	42.4
87.5°	33.3	27.6	27.9	26.4	23.1
90°	19.8	24.3	26.3	30.8	25.3
92.5°	37.7	35.6	35.2	41.2	39.3
95°	68.3	89.1	51.3	50.5	56.8
97.5°	93.7	151.8	284.1	86.2	72.6
100°	113.8	182.8	557.2	167.1	109.8
102.5°	133.8	208.7	750.6	429.5	234.0
105°	163.9	238.5	850.1	1077.9	711.4
107.5°	196.8	250.1	812.0	1567.5	1465.6
110°	216.9	268.7	789.6	1646.9	1766.9



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CATALOG NUMBER: OMN4DIP-SR4F0-125D100U830-CLBOOB-1DUDD-WW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	239.2	291.0	767.3	1600.5	1804.1
115°	269.9	321.7	733.8	1510.4	1762.3
117.5°	303.7	355.2	725.5	1413.0	1672.1
120°	327.5	377.5	710.6	1338.8	1608.8
122.5°	346.1	397.5	689.7	1275.1	1523.3
125°	375.8	425.8	692.0	1198.1	1413.5
127.5°	400.0	453.1	690.1	1108.2	1321.5
130°	414.8	469.4	693.8	1046.2	1250.8
132.5°	428.9	483.5	689.3	1019.3	1187.6
135°	455.7	505.7	688.2	984.4	1129.9
137.5°	478.9	532.6	688.2	945.8	1070.4
140°	497.5	547.5	688.2	923.2	1036.9
142.5°	516.1	562.5	691.9	897.0	1003.4
145°	539.4	584.8	692.8	857.6	948.6
147.5°	567.3	607.3	698.4	829.3	899.3
150°	585.9	622.3	702.1	810.4	869.5
152.5°	604.5	637.2	702.1	795.3	843.5
155°	632.4	655.1	706.8	777.3	813.7
157.5°	654.7	676.5	712.4	766.0	792.3
160°	669.6	687.8	716.1	758.4	781.2
162.5°	680.7	698.9	719.8	754.6	770.0
165°	702.1	711.2	725.4	744.3	757.9
167.5°	714.2	722.4	730.0	739.5	747.7
170°	725.4	729.9	730.0	739.4	744.0
172.5°	729.1	737.3	733.7	735.7	740.3
175°	739.3	743.9	739.3	734.6	730.0
177.5°	739.3	743.0	739.3	739.2	735.6
180°	739.3	739.3	739.3	739.3	739.3

(END OF REPORT)