

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: P645221

Luminaire Tested: OMN4DP-SR4F0-125D830-CLB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645221  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: OMN4DP-SR4F0-125D830-CLB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

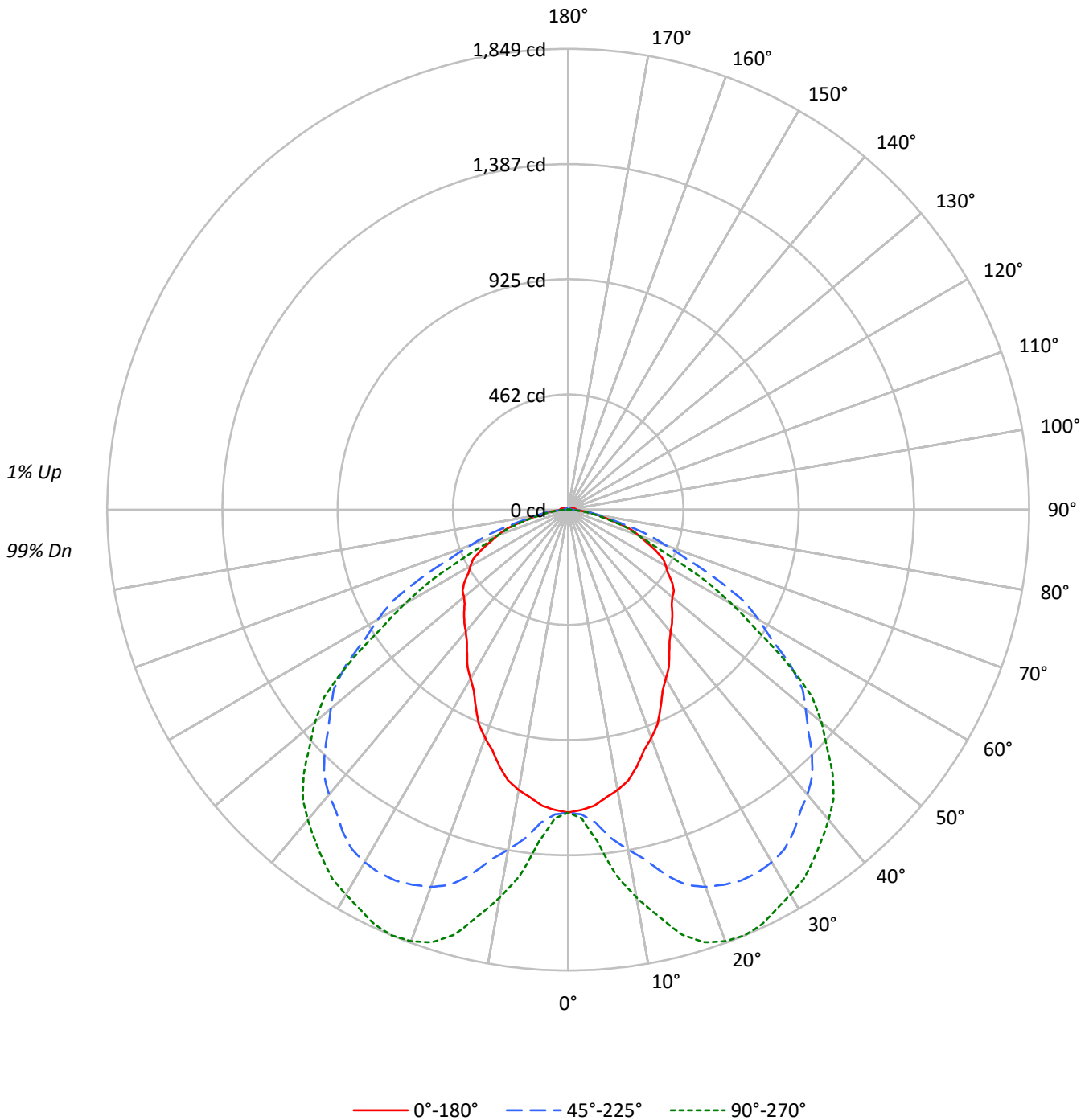
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4699.3 lumens  
Efficiency: N/A  
Efficacy: 117.5 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: Direct

Input Watts (W): 40  
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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	56	80	70	61	55	67	60	54	65	58	53	62	57	53	50
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	45	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

**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	2.7
10°-20°	414.1	8.8
20°-30°	688.0	14.6
30°-40°	867.9	18.5
40°-50°	927.7	19.7
50°-60°	818.8	17.4
60°-70°	525.5	11.2
70°-80°	233.0	5.0
80°-90°	60.4	1.3
90°-100°	15.9	0.3
100°-110°	10.2	0.2
110°-120°	7.7	0.2
120°-130°	4.9	0.1
130°-140°	0.5	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1226.7	26.1
0°-40°	2094.5	44.6
0°-60°	3841.1	81.7
0°-90°	4660.1	99.2
90°-120°	33.8	0.7
90°-150°	39.2	0.8
90°-180°	39.0	0.8
0°-180°	4699.3	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	20	17	17	11	14
95°	31	20	14	8	6	23
105°	20	17	8	3	0	22
115°	14	11	8	3	0	15
125°	8	8	8	3	0	8
135°	0	0	0	0	0	1
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**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	26.7	26.0	23.7	20.3
90°	19.8	19.8	17.0	16.8	11.3
92.5°	26.6	19.9	14.7	12.3	6.8
95°	31.1	20.0	14.1	8.4	5.7
97.5°	27.7	19.4	10.7	5.6	2.8
100°	25.4	17.1	8.5	5.6	2.8
102.5°	23.2	17.1	8.5	3.3	0.6
105°	19.8	17.0	8.5	2.8	0.0
107.5°	19.2	14.2	8.5	2.8	0.0
110°	17.0	14.2	8.5	2.8	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	17.0	14.2	8.5	2.8	0.0
115°	14.1	11.4	8.5	2.8	0.0
117.5°	13.6	11.4	8.5	2.8	0.0
120°	11.3	11.3	8.5	2.8	0.0
122.5°	11.3	9.1	6.2	2.8	0.0
125°	8.5	8.5	8.5	2.8	0.0
127.5°	5.7	7.9	5.7	2.2	0.0
130°	5.7	5.7	5.7	0.0	0.0
132.5°	1.1	1.1	1.1	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)