

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: P645224

Luminaire Tested: OMN4DP-SR4F0-125D835-FLL-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645224  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: OMN4DP-SR4F0-125D835-FLL-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

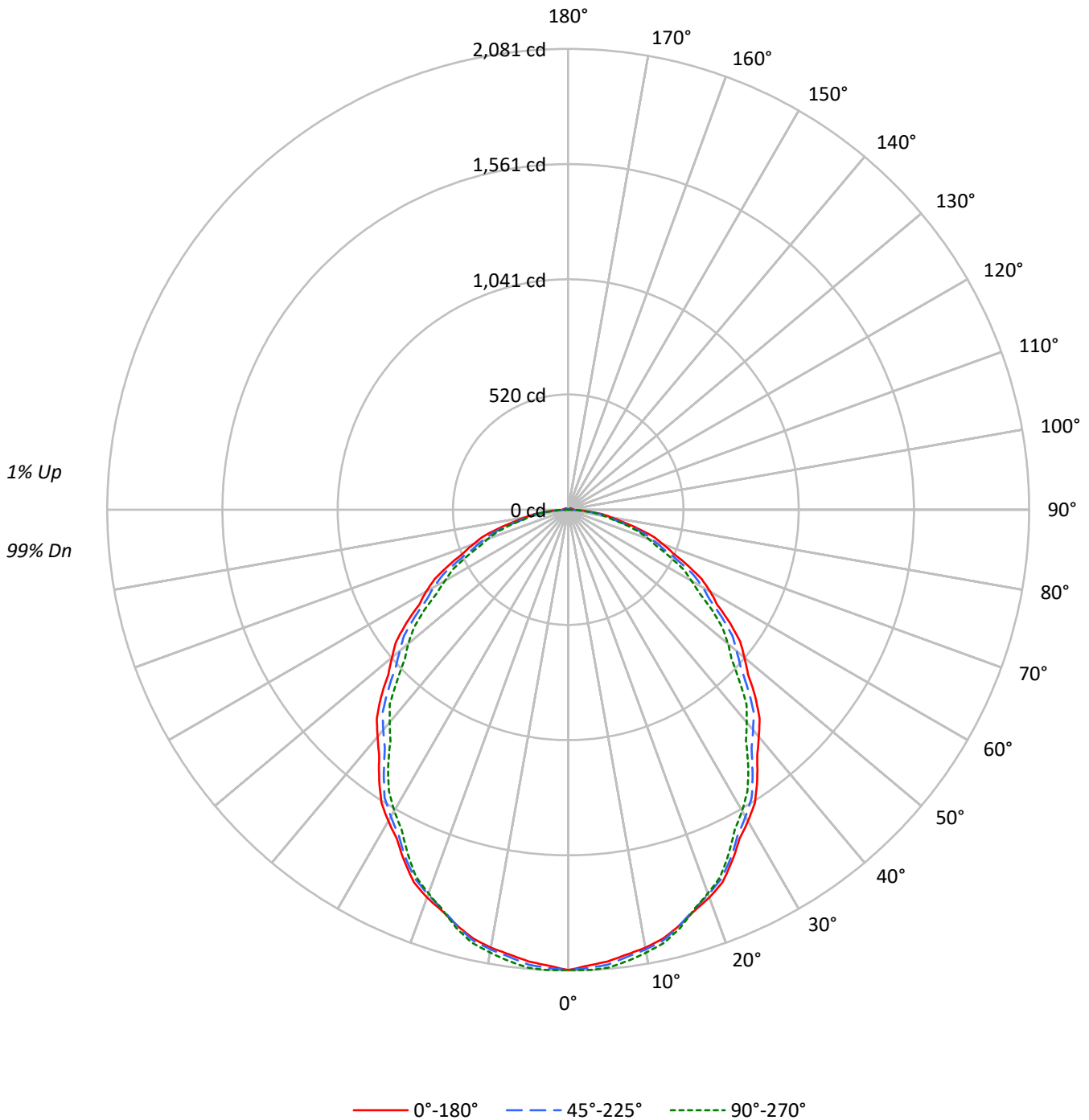
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5070.3 lumens  
Efficiency: N/A  
Efficacy: 126.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
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										
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	99																				
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																				
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71																				
3	91	81	73	67	89	79	72	66	76	70	65	73	68	63	71	66	62	60																				
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	63	58	54	52																				
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45																				
6	71	58	50	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40																				
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35																				
8	62	49	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32																				
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29																				
10	54	41	34	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26																				

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

	0°	45°	90°
0°	33562	33562	33562
5°	33187	33415	33645
10°	32921	33060	33292
15°	32476	32476	32665
20°	32022	31780	31682
25°	31187	30936	30533
30°	30266	29843	29263
35°	29321	28596	27928
40°	28195	27360	26407
45°	27252	26218	24928
50°	26070	24935	23657
55°	25078	23803	22370
60°	23928	22649	20731
65°	22690	21070	19450
70°	21493	19492	18156
75°	20112	17817	16937
80°	18410	16299	15518
85°	17284	15191	14153

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 27252 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.5	3.9
10°-20°	548.7	10.8
20°-30°	797.9	15.7
30°-40°	907.6	17.9
40°-50°	884.9	17.5
50°-60°	755.3	14.9
60°-70°	548.9	10.8
70°-80°	310.4	6.1
80°-90°	95.6	1.9
90°-100°	12.0	0.2
100°-110°	6.7	0.1
110°-120°	4.1	0.1
120°-130°	2.4	0.0
130°-140°	0.3	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°	1542.1	30.4
0°-40°	2449.7	48.3
0°-60°	4089.9	80.7
0°-90°	5044.8	99.5
90°-120°	22.9	0.5
90°-150°	25.5	0.5
90°-180°	26.0	0.5
0°-180°	5070.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2079	2079	2079	2079	2079	
5°	2048	2078	2062	2059	2076	194
15°	1943	1968	1943	1940	1954	548
25°	1751	1767	1736	1706	1714	805
35°	1488	1493	1451	1417	1417	929
45°	1194	1188	1148	1108	1092	918
55°	891	888	846	806	795	795
65°	594	588	552	517	509	590
75°	322	311	286	274	272	342
85°	93	82	82	79	76	100
90°	11	14	17	14	14	11
95°	23	12	8	8	6	17
105°	14	9	6	3	0	16
115°	8	6	3	0	0	10
125°	6	6	3	0	0	5
135°	0	0	0	0	0	0
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°	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2060.6	2087.1	2071.9	2072.1	2080.9
5°	2047.6	2078.0	2061.7	2059.3	2075.9
7.5°	2026.1	2055.9	2036.8	2033.9	2055.5
10°	2008.0	2035.6	2016.5	2011.2	2030.6
12.5°	1983.1	2010.7	1991.6	1984.1	2003.5
15°	1942.9	1967.8	1942.9	1940.4	1954.2
17.5°	1897.7	1919.2	1890.3	1881.0	1891.5
20°	1863.7	1883.1	1849.6	1835.6	1843.9
22.5°	1820.8	1840.1	1804.4	1783.7	1794.2
25°	1750.6	1767.2	1736.5	1705.6	1713.9
27.5°	1675.4	1688.1	1657.3	1625.7	1628.4
30°	1623.4	1631.6	1600.7	1566.9	1569.6
32.5°	1569.1	1575.1	1541.9	1505.7	1506.3
35°	1487.6	1493.1	1450.8	1416.9	1416.9
37.5°	1401.1	1404.4	1359.2	1322.3	1318.5
40°	1337.7	1343.2	1298.1	1261.2	1252.9
42.5°	1278.9	1280.0	1239.3	1202.3	1191.8
45°	1193.5	1187.9	1148.2	1108.3	1091.7
47.5°	1101.3	1101.3	1056.0	1016.1	1000.6
50°	1037.9	1037.9	992.7	952.8	941.8
52.5°	979.1	976.9	933.9	893.9	878.4
55°	890.9	888.1	845.6	805.8	794.7
57.5°	797.5	797.5	757.9	715.2	703.1
60°	741.0	741.0	701.4	658.6	642.0
62.5°	679.9	677.7	638.0	599.9	589.9
65°	593.9	588.4	551.5	517.4	509.1
67.5°	511.9	506.4	467.2	439.9	434.4
70°	455.3	449.8	412.9	390.2	384.6
72.5°	401.0	393.3	360.9	342.6	337.1
75°	322.4	311.3	285.6	274.3	271.5
77.5°	247.7	228.9	218.3	210.4	207.6
80°	198.0	181.4	175.3	169.6	166.9
82.5°	155.0	138.4	136.9	133.4	130.7
85°	93.3	82.3	82.0	79.1	76.4
87.5°	40.7	34.6	35.1	34.5	34.5
90°	11.3	14.1	17.0	14.1	14.1
92.5°	20.4	14.3	12.4	11.8	9.6
95°	22.6	11.6	8.5	8.4	5.7
97.5°	19.8	11.5	7.9	5.0	2.8
100°	19.8	11.5	5.7	2.8	2.8
102.5°	17.5	9.2	5.7	2.8	0.6
105°	14.1	8.6	5.7	2.8	0.0
107.5°	13.6	8.6	5.7	2.8	0.0
110°	11.3	8.5	5.7	2.8	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	11.3	8.5	5.7	2.8	0.0
115°	8.5	5.7	2.8	0.0	0.0
117.5°	8.5	5.7	2.8	0.0	0.0
120°	8.5	5.7	2.8	0.0	0.0
122.5°	6.2	5.7	2.8	0.0	0.0
125°	5.7	5.7	2.8	0.0	0.0
127.5°	2.8	5.0	2.8	0.0	0.0
130°	2.8	2.8	2.8	0.0	0.0
132.5°	0.6	0.6	0.6	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)