

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: P644698

Luminaire Tested: OMN4DIP-SR4F0-125D125U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644698  
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-SR4F0-125D125U835-CLBOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

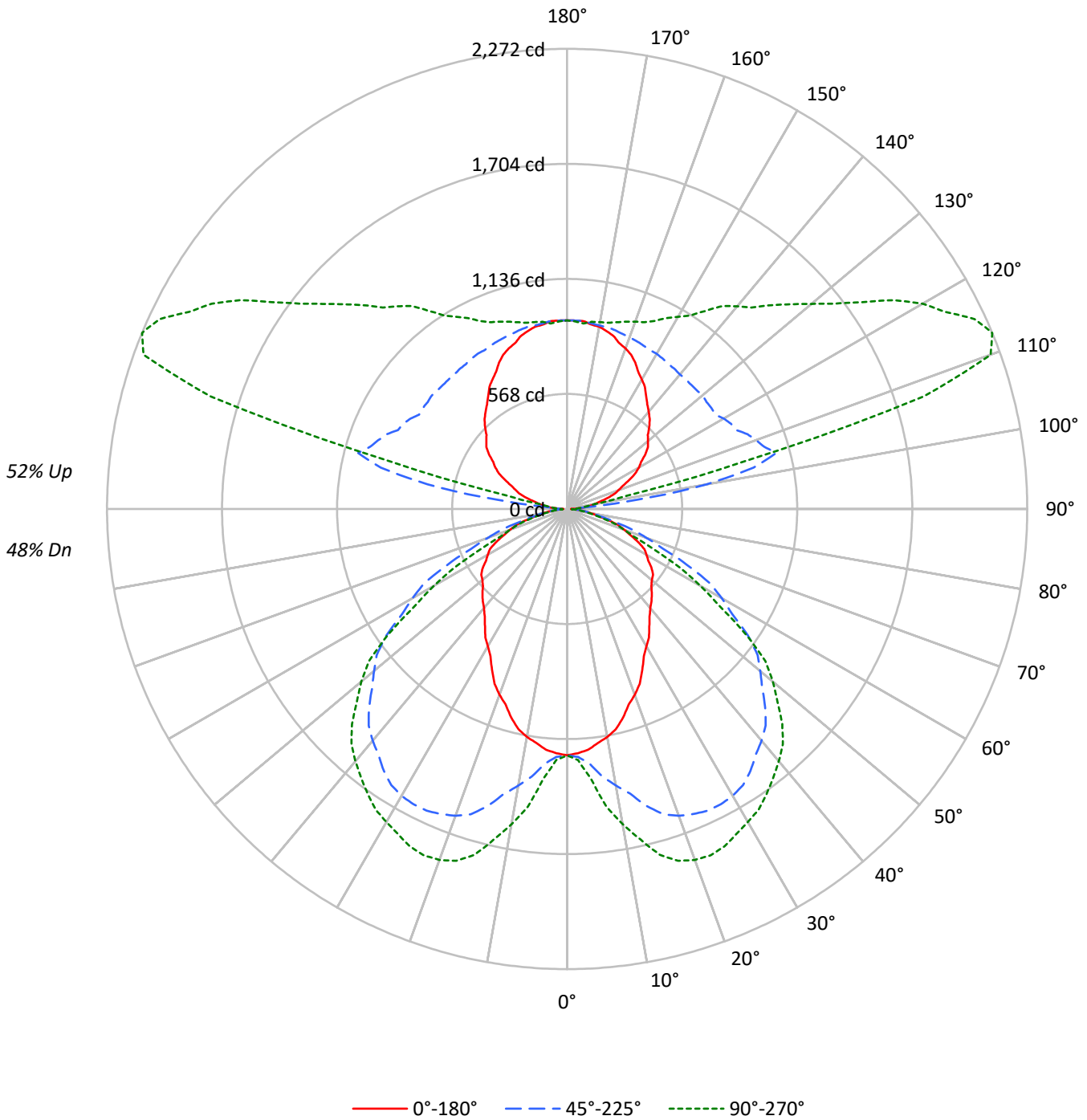
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9707.0 lumens  
Efficiency: N/A  
Efficacy: 124.1 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): 78.2  
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										
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48	48	48	48														
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41	40	39	38	37	36	35														
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	41	39	34	33	32	31	30	29	28														
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33	29	28	27	26	25	24	23														
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	31	28	24	23	22	21	20	19	18														
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24	21	20	19	18	17	16	15														
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21	18	17	16	15	14	13	12														
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	24	21	19	16	15	14	13	12	11	10														
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14	13	12	11	10	9	8														
9	49	37	30	24	45	35	28	23	30	24	20	25	21	18	21	17	15	12	11	10	9	8	7	6														
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	10	9	8	7	6	5	4														

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.7	1.3
10°-20°	414.5	4.3
20°-30°	688.6	7.1
30°-40°	868.7	8.9
40°-50°	928.6	9.6
50°-60°	819.6	8.4
60°-70°	526.0	5.4
70°-80°	233.3	2.4
80°-90°	62.6	0.6
90°-100°	130.4	1.3
100°-110°	825.9	8.5
110°-120°	1115.1	11.5
120°-130°	906.3	9.3
130°-140°	725.4	7.5
140°-150°	571.5	5.9
150°-160°	417.9	4.3
160°-170°	259.6	2.7
170°-180°	88.5	0.9
0°-30°	1227.8	12.6
0°-40°	2096.4	21.6
0°-60°	3844.6	39.6
0°-90°	4666.4	48.1
90°-120°	2071.4	21.3
90°-150°	4274.6	44.0
90°-180°	5041.0	51.9
0°-180°	9707.0	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	26	29	34	29	16
95°	78	107	61	61	70	76
105°	201	296	1068	1357	896	214
115°	336	402	922	1901	2219	334
125°	471	534	869	1508	1780	419
135°	574	637	867	1240	1423	442
145°	679	736	872	1080	1195	427
155°	796	825	890	979	1025	366
165°	884	896	914	937	954	248
175°	931	937	931	925	919	88
180°	931	931	931	931	931	

TEST NUMBER: P644698

CATALOG NUMBER: OMN4DIP-SR4F0-125D125U835-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	27.9	28.4	27.2	23.9
90°	19.8	25.5	28.7	34.4	28.9
92.5°	40.6	39.7	40.5	48.7	47.8
95°	78.0	107.0	61.0	61.4	70.1
97.5°	110.9	186.2	355.1	107.2	90.7
100°	136.7	225.8	699.5	209.0	137.5
102.5°	162.6	258.4	943.1	540.1	294.5
105°	201.3	295.9	1068.4	1356.7	895.9
107.5°	242.9	311.2	1020.3	1973.3	1845.7
110°	268.8	334.7	992.2	2073.3	2225.2



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CATALOG NUMBER: OMN4DIP-SR4F0-125D125U835-CLBOOB-1DUDD-WW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	296.9	362.8	964.1	2014.8	2272.0
115°	336.2	402.1	922.0	1901.4	2219.3
117.5°	379.0	444.3	911.4	1778.7	2105.7
120°	409.5	472.5	892.7	1685.3	2026.1
122.5°	432.9	498.3	867.0	1605.0	1918.3
125°	471.1	534.1	869.3	1508.1	1780.1
127.5°	502.2	568.6	867.6	1395.0	1664.2
130°	521.0	589.7	872.3	1317.5	1575.2
132.5°	539.9	608.6	867.8	1283.7	1495.5
135°	573.9	636.8	866.6	1239.7	1422.9
137.5°	603.1	670.7	866.6	1191.1	1348.0
140°	626.6	689.5	866.6	1162.7	1305.8
142.5°	650.0	708.4	871.3	1129.7	1263.7
145°	679.3	736.5	872.5	1080.1	1194.6
147.5°	714.4	764.8	879.5	1044.3	1132.5
150°	737.8	783.6	884.2	1020.6	1095.0
152.5°	761.2	802.5	884.2	1001.5	1062.2
155°	796.4	825.0	890.1	978.9	1024.7
157.5°	824.5	852.0	897.1	964.6	997.8
160°	843.2	866.1	901.8	955.1	983.8
162.5°	857.3	880.2	906.5	950.2	969.7
165°	884.2	895.7	913.5	937.3	954.5
167.5°	899.4	909.7	919.3	931.3	941.6
170°	913.5	919.2	919.3	931.2	936.9
172.5°	918.2	928.5	924.0	926.5	932.2
175°	931.1	936.8	931.1	925.1	919.3
177.5°	931.1	935.6	931.1	931.0	926.4
180°	931.1	931.1	931.1	931.1	931.1

(END OF REPORT)