

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: P644518

Luminaire Tested: OMN4DIP-SR4F0-100D125U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644518  
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-SR4F0-100D125U835-CLBOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

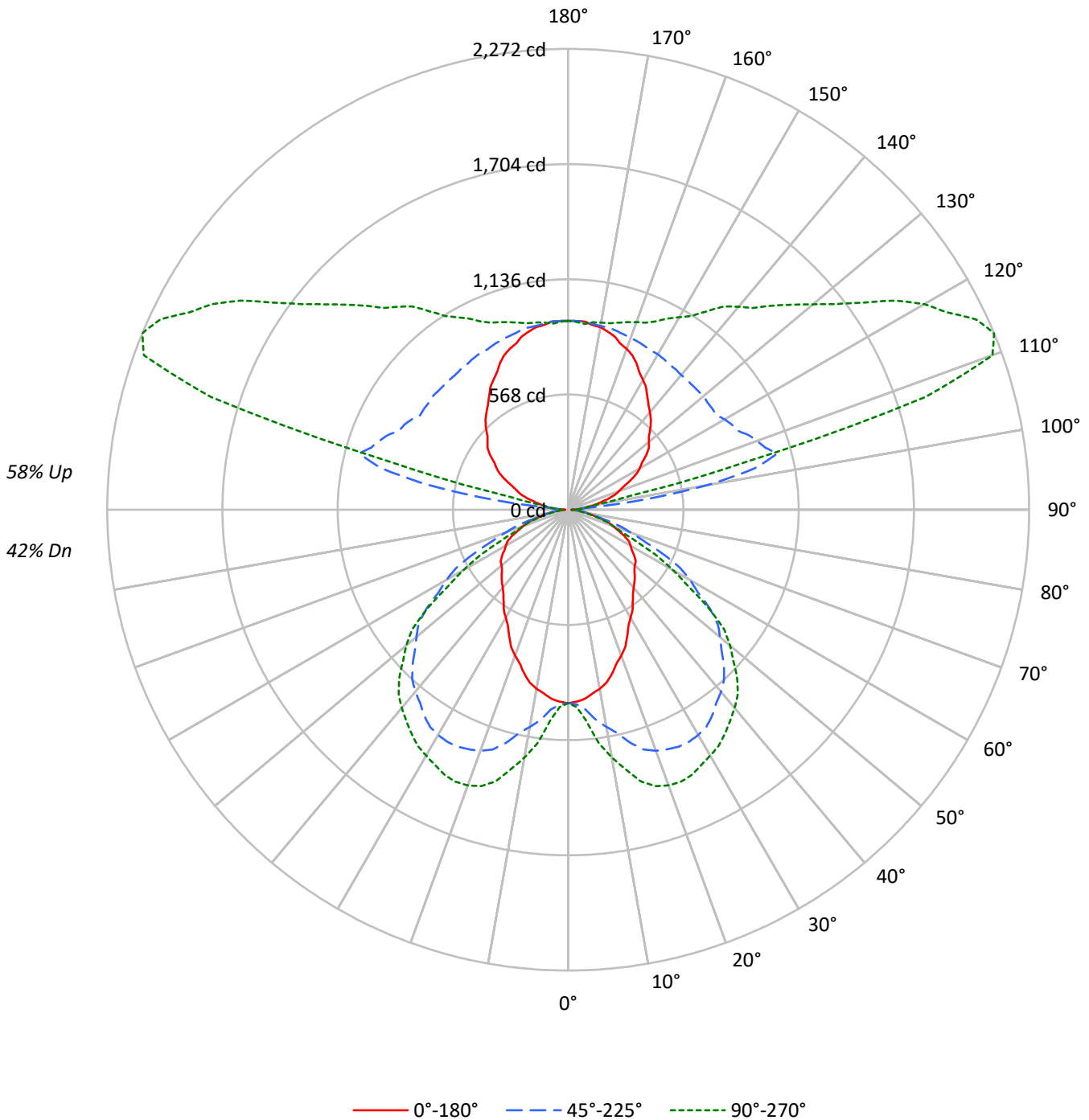
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8693.2 lumens  
Efficiency: N/A  
Efficacy: 127.7 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): 68.1  
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: P644518  
CATALOG NUMBER: OMN4DIP-SR4F0-100D125U835-CLBOOB-1DUDD-WW

### Luminous Intensity Polar Plot





TEST NUMBER: P644518

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U835-CLBOOB-1DUDD-WW

**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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42																				
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	36																				
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30																				
3	80	70	63	57	72	65	58	53	53	49	45	43	40	37	34	31	30	25																				
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25	21																				
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	18																				
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16																				
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14																				
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	12																				
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	16	13	11																				
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10																				

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

	0°	45°	90°
0°	15403	15403	15403
5°	15175	16037	16973
10°	14695	17823	20333
15°	13981	19915	23178
20°	13151	21728	24854
25°	12253	22963	25691
30°	11458	23909	26099
35°	10933	24402	26544
40°	10568	24689	26888
45°	10588	24772	26900
50°	10756	24521	26136
55°	11240	24045	23733
60°	11464	22352	19272
65°	11610	19580	14155
70°	11103	15394	10999
75°	9963	11485	9270
80°	8461	9075	7429
85°	8225	7392	6169

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 26900 cd/sqm



TEST NUMBER: P644518

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U835-CLBOOB-1DUDD-WW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.8	1.1
10°-20°	325.1	3.7
20°-30°	540.2	6.2
30°-40°	681.4	7.8
40°-50°	728.4	8.4
50°-60°	642.9	7.4
60°-70°	412.6	4.7
70°-80°	183.0	2.1
80°-90°	49.5	0.6
90°-100°	127.0	1.5
100°-110°	823.7	9.5
110°-120°	1113.5	12.8
120°-130°	905.2	10.4
130°-140°	725.3	8.3
140°-150°	571.5	6.6
150°-160°	417.9	4.8
160°-170°	259.6	3.0
170°-180°	88.5	1.0
0°-30°	963.2	11.1
0°-40°	1644.6	18.9
0°-60°	3016.0	34.7
0°-90°	3661.1	42.1
90°-120°	2064.1	23.7
90°-150°	4266.2	49.1
90°-180°	5032.0	57.9
0°-180°	8693.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	936	964	990	1023	1047	88
15°	836	964	1191	1335	1387	234
25°	688	933	1289	1410	1442	317
35°	555	852	1238	1318	1347	348
45°	464	728	1085	1152	1178	358
55°	399	573	854	858	843	354
65°	304	384	512	416	370	297
75°	160	177	184	157	149	171
85°	44	38	40	35	33	47
90°	16	21	25	31	26	13
95°	71	103	58	60	69	71
105°	197	292	1066	1356	896	209
115°	333	400	920	1901	2219	331
125°	469	532	867	1508	1780	417
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: P644518

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U835-CLBOOB-1DUDD-WW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	954.0	954.0	954.0	954.0	954.0
2.5°	946.9	960.8	961.1	966.6	973.5
5°	936.3	964.5	989.5	1023.3	1047.2
7.5°	914.1	964.4	1044.5	1123.1	1162.1
10°	896.3	965.7	1087.1	1192.5	1240.2
12.5°	873.2	965.2	1129.7	1256.5	1311.2
15°	836.4	964.4	1191.4	1334.6	1386.6
17.5°	793.8	960.4	1239.8	1383.2	1428.8
20°	765.4	956.3	1264.6	1401.0	1446.5
22.5°	733.5	946.9	1278.8	1409.8	1451.9
25°	687.8	932.9	1289.0	1409.6	1442.1
27.5°	643.0	912.8	1289.5	1391.7	1419.5
30°	614.6	896.6	1282.4	1373.9	1399.9
32.5°	589.7	878.7	1268.2	1352.6	1380.4
35°	554.7	851.8	1238.0	1318.5	1346.7
37.5°	524.5	821.2	1199.8	1278.2	1311.2
40°	501.4	796.4	1171.4	1249.7	1275.7
42.5°	483.7	770.0	1137.7	1214.1	1236.6
45°	463.7	728.3	1084.9	1152.0	1178.1
47.5°	442.4	685.4	1024.1	1087.5	1104.4
50°	428.2	653.8	976.2	1034.0	1040.5
52.5°	419.3	620.6	930.0	966.5	967.8
55°	399.3	572.9	854.2	858.3	843.1
57.5°	372.7	517.2	757.9	736.2	699.7
60°	355.0	478.6	692.2	648.9	596.8
62.5°	337.2	441.8	623.0	552.8	492.1
65°	303.9	384.2	512.5	416.1	370.5
67.5°	265.3	320.9	402.5	311.2	280.9
70°	235.2	278.6	326.1	254.6	233.0
72.5°	206.8	236.3	264.0	210.5	199.2
75°	159.7	177.1	184.1	157.3	148.6
77.5°	117.6	118.5	127.8	110.8	106.5
80°	91.0	86.6	97.6	84.2	79.9
82.5°	69.7	63.6	71.0	61.2	58.6
85°	44.4	37.9	39.9	35.4	33.3
87.5°	26.2	22.1	22.8	22.1	19.5
90°	15.5	21.3	25.0	30.8	26.4
92.5°	34.9	35.4	37.3	46.1	46.3
95°	71.3	102.7	57.9	59.6	68.8
97.5°	104.9	182.0	352.7	106.0	90.1
100°	131.2	222.1	697.6	207.8	136.9
102.5°	157.6	254.7	941.2	539.3	294.4
105°	197.1	292.2	1066.5	1356.1	895.9
107.5°	238.8	308.2	1018.5	1972.7	1845.7
110°	265.1	331.6	990.4	2072.7	2225.2



TEST NUMBER: P644518

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U835-CLBOOB-1DUDD-WW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	359.8	962.3	2014.2	2272.0
115°	333.2	399.7	920.1	1900.8	2219.3
117.5°	376.0	441.9	909.6	1778.1	2105.7
120°	407.1	470.0	890.9	1684.7	2026.1
122.5°	430.5	496.3	865.7	1604.4	1918.3
125°	469.3	532.2	867.4	1507.5	1780.1
127.5°	501.0	566.9	866.4	1394.5	1664.2
130°	519.7	588.4	871.1	1317.5	1575.2
132.5°	539.6	608.3	867.5	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)