

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: P644569

Luminaire Tested: OMN4DIP-SR4F0-100D150U940-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644569
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-SR4F0-100D150U940-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

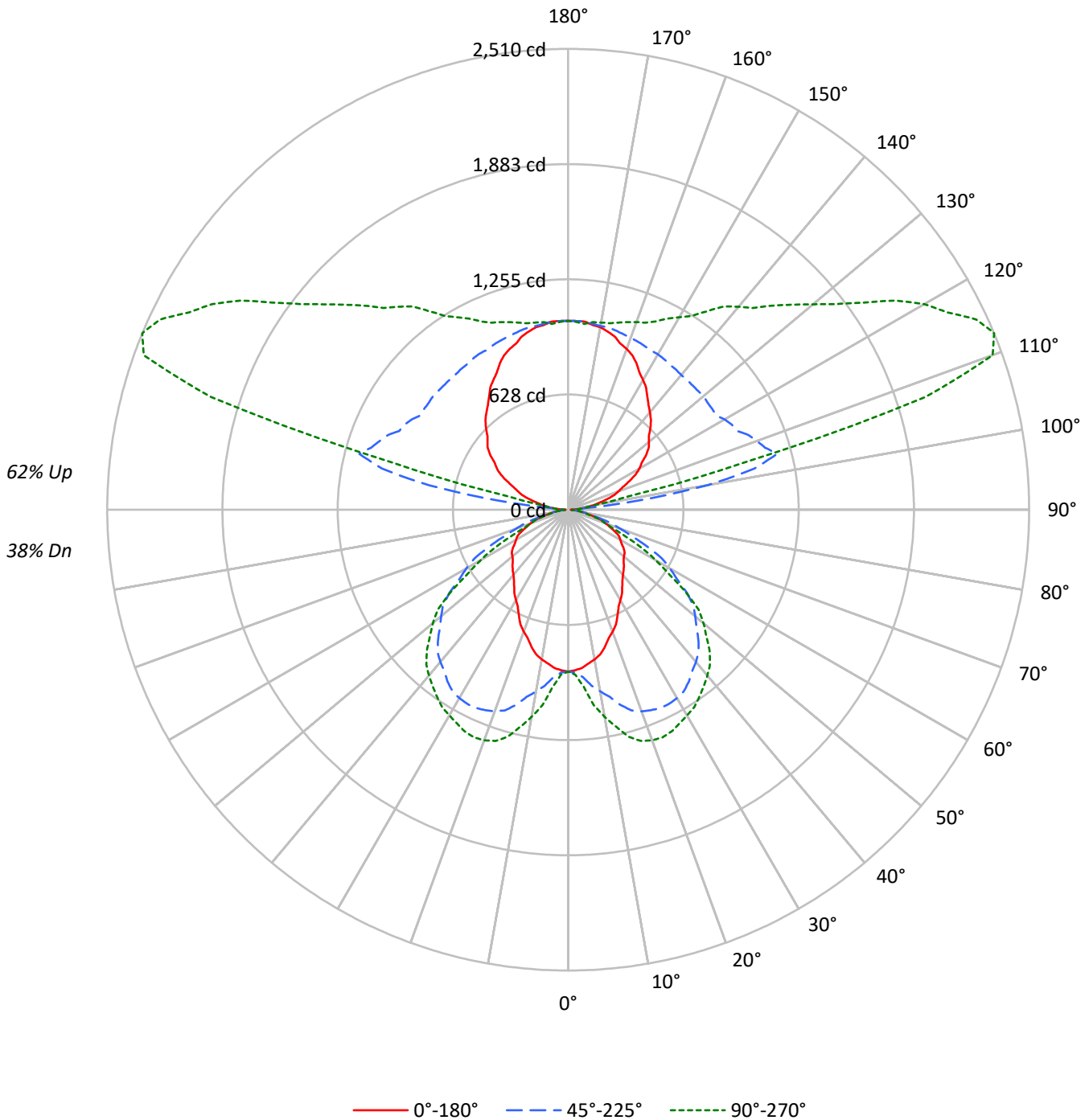
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8938.2 lumens
Efficiency: N/A
Efficacy: 113.9 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: Semi-Indirect

Input Watts (W): 78.5
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

TEST NUMBER: P644569
CATALOG NUMBER: OMN4DIP-SR4F0-100D150U940-CLBOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644569

CATALOG NUMBER: OMN4DIP-SR4F0-100D150U940-CLBOOB-1DUDD-WW

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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38	32
2	87	79	73	68	78	72	67	63	59	55	52	46	44	42	35	33	32	27
3	79	70	62	57	71	63	57	52	52	47	44	41	38	35	31	29	27	23
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	28	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	25	22	20	17
6	61	49	41	35	55	45	38	32	37	31	27	29	25	22	22	20	18	14
7	56	44	36	30	51	40	33	28	33	28	24	26	23	20	20	18	15	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11
9	48	36	29	24	44	33	26	22	27	22	19	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14236	14236	14236
5°	14024	14822	15686
10°	13580	16472	18792
15°	12921	18404	21421
20°	12155	20081	22969
25°	11323	21223	23742
30°	10590	22095	24121
35°	10104	22551	24532
40°	9767	22818	24850
45°	9784	22893	24859
50°	9939	22662	24154
55°	10390	22221	21931
60°	10595	20657	17809
65°	10732	18094	13081
70°	10258	14228	10164
75°	9208	10618	8571
80°	7820	8387	6862
85°	7595	6836	5706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 24859 cd/sqm



TEST NUMBER: P644569

CATALOG NUMBER: OMN4DIP-SR4F0-100D150U940-CLBOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	1.0
10°-20°	300.5	3.4
20°-30°	499.2	5.6
30°-40°	629.8	7.0
40°-50°	673.2	7.5
50°-60°	594.2	6.6
60°-70°	381.3	4.3
70°-80°	169.1	1.9
80°-90°	46.2	0.5
90°-100°	138.0	1.5
100°-110°	908.7	10.2
110°-120°	1229.2	13.8
120°-130°	999.4	11.2
130°-140°	801.3	9.0
140°-150°	631.5	7.1
150°-160°	461.7	5.2
160°-170°	286.8	3.2
170°-180°	97.8	1.1
0°-30°	890.1	10.0
0°-40°	1519.9	17.0
0°-60°	2787.3	31.2
0°-90°	3383.9	37.9
90°-120°	2275.8	25.5
90°-150°	4708.0	52.7
90°-180°	5554.0	62.1
0°-180°	8938.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	865	891	914	946	968	81
15°	773	891	1101	1233	1282	216
25°	636	862	1191	1303	1333	293
35°	513	787	1144	1218	1245	322
45°	428	673	1003	1065	1089	331
55°	369	530	789	793	779	327
65°	281	355	474	384	342	275
75°	148	164	170	145	137	158
85°	41	35	37	33	31	43
90°	14	21	25	32	28	12
95°	74	111	62	65	75	75
105°	215	320	1177	1498	990	228
115°	366	440	1015	2100	2452	364
125°	517	587	957	1665	1967	460
135°	634	704	958	1370	1572	488
145°	750	814	964	1193	1320	471
155°	880	912	983	1082	1132	404
165°	977	990	1009	1036	1055	274
175°	1029	1035	1029	1022	1016	97
180°	1029	1029	1029	1029	1029	



TEST NUMBER: P644569

CATALOG NUMBER: OMN4DIP-SR4F0-100D150U940-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	881.7	881.7	881.7	881.7	881.7
2.5°	875.1	887.9	888.2	893.3	899.7
5°	865.3	891.3	914.5	945.7	967.8
7.5°	844.8	891.3	965.3	1037.9	1074.0
10°	828.3	892.5	1004.7	1102.0	1146.2
12.5°	807.0	892.0	1044.0	1161.2	1211.8
15°	773.0	891.3	1101.0	1233.4	1281.5
17.5°	733.6	887.6	1145.7	1278.3	1320.4
20°	707.4	883.8	1168.7	1294.7	1336.8
22.5°	677.9	875.1	1181.8	1302.9	1341.8
25°	635.6	862.2	1191.3	1302.7	1332.7
27.5°	594.2	843.6	1191.7	1286.2	1311.8
30°	568.0	828.6	1185.1	1269.7	1293.8
32.5°	545.0	812.0	1172.0	1250.1	1275.7
35°	512.6	787.2	1144.1	1218.5	1244.6
37.5°	484.7	759.0	1108.8	1181.3	1211.8
40°	463.4	736.0	1082.6	1154.9	1179.0
42.5°	447.0	711.6	1051.4	1122.0	1142.9
45°	428.5	673.1	1002.6	1064.7	1088.7
47.5°	408.8	633.4	946.4	1005.0	1020.7
50°	395.7	604.2	902.2	955.6	961.6
52.5°	387.5	573.6	859.5	893.2	894.4
55°	369.1	529.5	789.4	793.2	779.1
57.5°	344.5	478.0	700.4	680.4	646.7
60°	328.1	442.3	639.7	599.7	551.5
62.5°	311.7	408.3	575.7	510.9	454.8
65°	280.9	355.1	473.6	384.5	342.4
67.5°	245.2	296.5	371.9	287.6	259.6
70°	217.3	257.4	301.4	235.3	215.3
72.5°	191.1	218.4	244.0	194.5	184.1
75°	147.6	163.7	170.2	145.4	137.4
77.5°	108.7	109.5	118.1	102.4	98.4
80°	84.1	80.1	90.2	77.8	73.8
82.5°	64.4	58.8	65.6	56.5	54.1
85°	41.0	35.0	36.9	32.8	30.8
87.5°	24.2	20.6	21.5	21.1	18.6
90°	14.4	20.7	25.2	31.6	27.6
92.5°	34.8	36.3	39.1	49.2	50.2
95°	74.3	110.6	62.0	64.6	75.3
97.5°	112.0	198.3	388.2	116.3	99.1
100°	141.4	242.9	769.6	228.8	150.9
102.5°	170.8	279.0	1038.7	595.4	325.2
105°	214.9	320.5	1177.2	1498.0	989.9
107.5°	261.1	338.5	1124.1	2179.2	2039.3
110°	290.5	364.4	1093.1	2289.7	2458.5



TEST NUMBER: P644569

CATALOG NUMBER: OMN4DIP-SR4F0-100D150U940-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	321.6	395.5	1062.0	2225.1	2510.3
115°	366.1	440.0	1015.4	2099.8	2452.0
117.5°	413.6	486.6	1003.8	1964.2	2326.5
120°	448.1	517.7	983.1	1861.0	2238.5
122.5°	474.0	547.1	955.6	1772.3	2119.5
125°	517.3	586.8	957.2	1665.2	1966.8
127.5°	552.7	625.2	956.5	1540.5	1838.7
130°	573.4	649.4	961.6	1455.7	1740.4
132.5°	596.0	672.0	958.3	1418.3	1652.4
135°	634.0	703.6	957.5	1369.7	1572.2
137.5°	666.4	741.0	957.5	1316.0	1489.3
140°	692.3	761.9	957.5	1284.6	1442.8
142.5°	718.1	782.7	962.7	1248.1	1396.2
145°	750.5	813.8	964.0	1193.3	1319.8
147.5°	789.3	845.0	971.8	1153.8	1251.3
150°	815.2	865.8	976.9	1127.6	1209.8
152.5°	841.1	886.6	976.9	1106.6	1173.6
155°	879.9	911.5	983.4	1081.6	1132.2
157.5°	910.9	941.3	991.2	1065.8	1102.4
160°	931.6	957.0	996.3	1055.3	1086.9
162.5°	947.2	972.5	1001.5	1049.9	1071.4
165°	976.9	989.6	1009.3	1035.6	1054.6
167.5°	993.8	1005.1	1015.8	1029.0	1040.3
170°	1009.3	1015.6	1015.8	1028.8	1035.2
172.5°	1014.5	1025.8	1020.9	1023.7	1030.0
175°	1028.7	1035.0	1028.7	1022.1	1015.8
177.5°	1028.7	1033.8	1028.7	1028.6	1023.5
180°	1028.7	1028.7	1028.7	1028.7	1028.7

(END OF REPORT)