

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: P644683

Luminaire Tested: OMN4DIP-SR4F0-125D100U935-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644683  
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-SR4F0-125D100U935-CLBOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

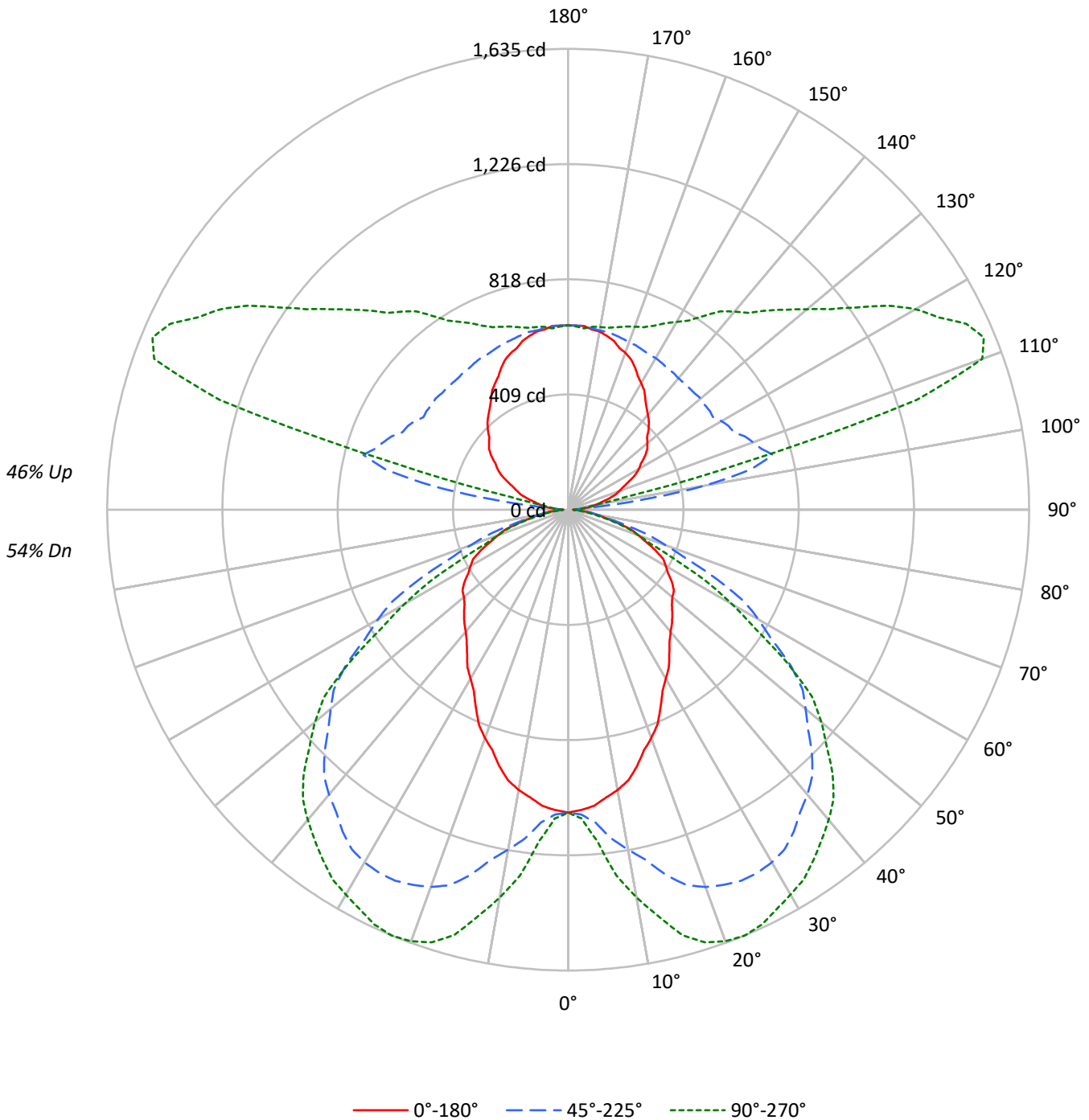
Lumens per Lamp: N/A  
Luminaire Lumens: 7670.3 lumens  
Efficiency: N/A  
Efficacy: 111.2 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 69  
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				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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54
1	99	94	91	87	91	88	84	81	75	73	70	64	62	60	53	52	51	46
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	44	43	38
3	82	72	65	59	76	67	61	56	58	53	49	49	45	42	41	38	36	32
4	75	64	56	50	69	60	52	47	51	46	41	44	39	36	37	33	31	27
5	69	57	49	42	63	53	46	40	46	40	36	39	35	31	33	29	27	24
6	63	51	43	37	58	47	40	35	41	35	31	35	31	27	30	26	23	20
7	58	46	38	32	54	43	35	30	37	31	27	32	27	24	27	23	21	18
8	54	41	34	28	50	39	32	27	34	28	24	29	24	21	25	21	18	16
9	50	38	30	25	46	35	28	24	31	25	21	27	22	19	23	19	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	21	17	15	13

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

	0°	45°	90°
0°	17350	17350	17350
5°	17092	18065	19118
10°	16552	20077	22904
15°	15749	22432	26108
20°	14814	24476	27996
25°	13801	25867	28939
30°	12905	26931	29399
35°	12315	27486	29899
40°	11904	27811	30288
45°	11926	27905	30300
50°	12115	27620	29441
55°	12662	27083	26733
60°	12913	25178	21710
65°	13081	22055	15943
70°	12505	17344	12387
75°	11223	12938	10443
80°	9530	10228	8368
85°	9263	8336	6947

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 30300 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.2	1.4
10°-20°	366.3	4.8
20°-30°	608.5	7.9
30°-40°	767.6	10.0
40°-50°	820.5	10.7
50°-60°	724.2	9.4
60°-70°	464.8	6.1
70°-80°	206.1	2.7
80°-90°	54.9	0.7
90°-100°	94.5	1.2
100°-110°	581.9	7.6
110°-120°	784.6	10.2
120°-130°	637.4	8.3
130°-140°	509.6	6.6
140°-150°	401.4	5.2
150°-160°	293.5	3.8
160°-170°	182.3	2.4
170°-180°	62.2	0.8
0°-30°	1084.9	14.1
0°-40°	1852.5	24.2
0°-60°	3397.3	44.3
0°-90°	4123.1	53.8
90°-120°	1460.9	19.0
90°-150°	3009.3	39.2
90°-180°	3547.0	46.2
0°-180°	7670.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1055	1086	1115	1153	1180	99
15°	942	1086	1342	1503	1562	264
25°	775	1051	1452	1588	1624	356
35°	625	960	1394	1485	1517	392
45°	522	820	1222	1298	1327	404
55°	450	645	962	967	950	399
65°	342	433	577	469	417	335
75°	180	200	207	177	167	192
85°	50	43	45	40	38	53
90°	18	22	23	27	22	13
95°	60	79	45	45	50	57
105°	145	211	752	953	629	154
115°	239	284	649	1336	1559	237
125°	332	377	612	1060	1250	295
135°	403	447	609	871	999	311
145°	477	517	613	758	839	300
155°	559	579	625	688	720	257
165°	621	629	642	658	670	174
175°	654	658	654	650	646	62
180°	654	654	654	654	654	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1074.6	1074.6	1074.6	1074.6	1074.6
2.5°	1066.6	1082.3	1082.6	1088.8	1096.6
5°	1054.6	1086.4	1114.6	1152.7	1179.6
7.5°	1029.6	1086.3	1176.6	1265.0	1309.0
10°	1009.6	1087.8	1224.6	1343.2	1397.0
12.5°	983.6	1087.2	1272.5	1415.4	1477.0
15°	942.2	1086.3	1342.0	1503.3	1561.9
17.5°	894.2	1081.8	1396.5	1558.1	1609.4
20°	862.2	1077.2	1424.5	1578.1	1629.4
22.5°	826.2	1066.6	1440.5	1588.0	1635.4
25°	774.7	1050.8	1452.0	1587.8	1624.4
27.5°	724.2	1028.2	1452.5	1567.6	1598.9
30°	692.2	1009.9	1444.5	1547.6	1576.9
32.5°	664.3	989.7	1428.5	1523.7	1554.9
35°	624.8	959.5	1394.5	1485.2	1516.9
37.5°	590.8	925.1	1351.5	1439.8	1477.0
40°	564.8	897.1	1319.5	1407.7	1437.0
42.5°	544.8	867.4	1281.5	1367.6	1393.0
45°	522.3	820.4	1222.1	1297.7	1327.0
47.5°	498.3	772.0	1153.6	1225.0	1244.0
50°	482.3	736.5	1099.6	1164.7	1172.1
52.5°	472.3	699.1	1047.6	1088.6	1090.1
55°	449.8	645.3	962.1	966.8	949.7
57.5°	419.8	582.6	853.7	829.3	788.2
60°	399.9	539.1	779.7	730.9	672.3
62.5°	379.9	497.6	701.7	622.7	554.3
65°	342.4	432.8	577.3	468.7	417.3
67.5°	298.9	361.4	453.3	350.6	316.4
70°	264.9	313.8	367.4	286.8	262.4
72.5°	232.9	266.1	297.4	237.1	224.4
75°	179.9	199.5	207.4	177.2	167.4
77.5°	132.5	133.4	143.9	124.8	120.0
80°	102.5	97.6	110.0	94.9	90.0
82.5°	78.5	71.6	80.0	68.9	66.0
85°	50.0	42.7	45.0	39.9	37.5
87.5°	29.5	24.4	24.6	23.4	20.5
90°	17.5	21.5	23.2	27.2	22.3
92.5°	33.4	31.5	31.1	36.5	34.8
95°	60.4	78.8	45.4	44.6	50.2
97.5°	82.9	134.3	251.3	76.3	64.2
100°	100.6	161.7	492.8	147.8	97.1
102.5°	118.4	184.6	663.9	379.9	206.9
105°	145.0	210.9	751.9	953.4	629.2
107.5°	174.1	221.2	718.1	1386.4	1296.3
110°	191.8	237.6	698.4	1456.6	1562.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	211.6	257.4	678.7	1415.6	1595.7
115°	238.7	284.5	649.1	1335.9	1558.7
117.5°	268.6	314.1	641.7	1249.7	1478.9
120°	289.6	333.9	628.5	1184.1	1422.9
122.5°	306.1	351.6	610.0	1127.7	1347.3
125°	332.4	376.6	612.0	1059.6	1250.2
127.5°	353.7	400.7	610.4	980.1	1168.8
130°	366.9	415.2	613.7	925.3	1106.3
132.5°	379.4	427.6	609.7	901.6	1050.3
135°	403.0	447.3	608.7	870.7	999.3
137.5°	423.6	471.0	608.7	836.5	946.7
140°	440.0	484.3	608.7	816.6	917.1
142.5°	456.5	497.5	611.9	793.4	887.5
145°	477.1	517.3	612.8	758.5	839.0
147.5°	501.7	537.1	617.7	733.4	795.4
150°	518.2	550.4	621.0	716.8	769.0
152.5°	534.6	563.6	621.0	703.4	746.0
155°	559.3	579.4	625.1	687.5	719.7
157.5°	579.0	598.3	630.0	677.5	700.8
160°	592.2	608.3	633.3	670.8	690.9
162.5°	602.1	618.2	636.6	667.4	681.0
165°	621.0	629.0	641.6	658.3	670.3
167.5°	631.7	638.9	645.7	654.1	661.3
170°	641.6	645.6	645.7	654.0	658.0
172.5°	644.8	652.1	649.0	650.7	654.7
175°	653.9	657.9	653.9	649.7	645.7
177.5°	653.9	657.1	653.9	653.8	650.6
180°	653.9	653.9	653.9	653.9	653.9

(END OF REPORT)