

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: P644689

Luminaire Tested: OMN4DIP-SR4F0-125D100U940-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644689  
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-SR4F0-125D100U940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

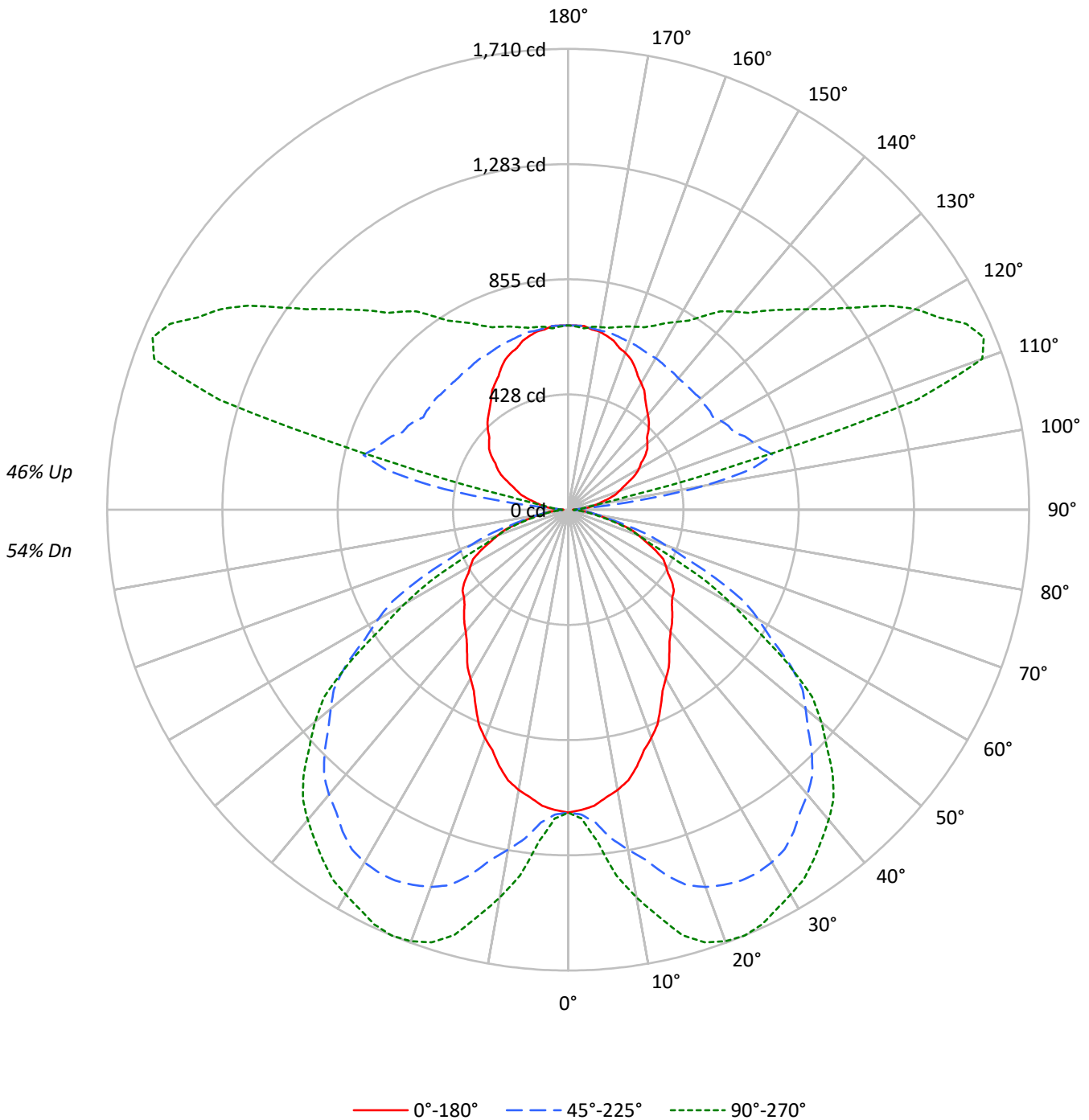
Lumens per Lamp: N/A  
Luminaire Lumens: 8022.0 lumens  
Efficiency: N/A  
Efficacy: 116.3 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 69  
Input Voltage (V): 120  
Input Current (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					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	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°	18146	18146	18146
5°	17877	18893	19995
10°	17311	20997	23953
15°	16471	23460	27305
20°	15493	25598	29280
25°	14434	27052	30266
30°	13498	28165	30747
35°	12879	28746	31271
40°	12450	29086	31676
45°	12474	29184	31691
50°	12670	28886	30790
55°	13244	28327	27958
60°	13504	26334	22704
65°	13681	23068	16676
70°	13076	18137	12954
75°	11740	13531	10923
80°	9967	10693	8749
85°	9689	8707	7262

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 31691 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.3	1.4
10°-20°	383.0	4.8
20°-30°	636.4	7.9
30°-40°	802.8	10.0
40°-50°	858.2	10.7
50°-60°	757.4	9.4
60°-70°	486.1	6.1
70°-80°	215.6	2.7
80°-90°	57.4	0.7
90°-100°	98.8	1.2
100°-110°	608.6	7.6
110°-120°	820.6	10.2
120°-130°	666.6	8.3
130°-140°	532.9	6.6
140°-150°	419.8	5.2
150°-160°	306.9	3.8
160°-170°	190.7	2.4
170°-180°	65.0	0.8
0°-30°	1134.7	14.1
0°-40°	1937.4	24.2
0°-60°	3553.0	44.3
0°-90°	4312.1	53.8
90°-120°	1527.9	19.0
90°-150°	3147.2	39.2
90°-180°	3710.0	46.2
0°-180°	8022.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1124	1124	1124	1124	1124	
5°	1103	1136	1166	1206	1234	104
15°	985	1136	1404	1572	1634	276
25°	810	1099	1518	1661	1699	373
35°	653	1004	1458	1553	1586	410
45°	546	858	1278	1357	1388	422
55°	470	675	1006	1011	993	417
65°	358	453	604	490	436	350
75°	188	209	217	185	175	201
85°	52	45	47	42	39	55
90°	18	22	24	28	23	14
95°	63	82	48	47	52	60
105°	152	221	786	997	658	161
115°	250	298	679	1397	1630	248
125°	348	394	640	1108	1308	309
135°	422	468	637	911	1045	325
145°	499	541	641	793	877	313
155°	585	606	654	719	753	269
165°	650	658	671	688	701	182
175°	684	688	684	680	675	65
180°	684	684	684	684	684	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1123.9	1123.9	1123.9	1123.9	1123.9
2.5°	1115.5	1131.9	1132.2	1138.7	1146.9
5°	1103.0	1136.2	1165.7	1205.5	1233.7
7.5°	1076.8	1136.1	1230.5	1323.0	1369.0
10°	1055.9	1137.7	1280.7	1404.8	1461.0
12.5°	1028.7	1137.1	1330.9	1480.3	1544.7
15°	985.4	1136.1	1403.5	1572.2	1633.5
17.5°	935.2	1131.4	1460.5	1629.5	1683.2
20°	901.7	1126.6	1489.8	1650.4	1704.1
22.5°	864.1	1115.5	1506.5	1660.8	1710.4
25°	810.2	1099.0	1518.5	1660.6	1698.9
27.5°	757.4	1075.4	1519.1	1639.5	1672.2
30°	724.0	1056.2	1510.7	1618.6	1649.2
32.5°	694.7	1035.1	1494.0	1593.5	1626.2
35°	653.4	1003.5	1458.4	1553.3	1586.5
37.5°	617.9	967.5	1413.5	1505.8	1544.7
40°	590.7	938.3	1380.0	1472.2	1502.9
42.5°	569.8	907.1	1340.3	1430.3	1456.9
45°	546.3	858.0	1278.1	1357.2	1387.9
47.5°	521.2	807.4	1206.5	1281.2	1301.1
50°	504.4	770.2	1150.0	1218.1	1225.8
52.5°	494.0	731.1	1095.7	1138.6	1140.1
55°	470.5	674.9	1006.3	1011.1	993.2
57.5°	439.1	609.3	892.8	867.3	824.4
60°	418.2	563.9	815.5	764.4	703.1
62.5°	397.3	520.5	733.9	651.3	579.7
65°	358.1	452.6	603.8	490.2	436.5
67.5°	312.6	378.0	474.1	366.7	330.9
70°	277.0	328.2	384.2	300.0	274.4
72.5°	243.6	278.4	311.0	248.0	234.7
75°	188.2	208.6	216.9	185.3	175.1
77.5°	138.5	139.5	150.5	130.6	125.5
80°	107.2	102.0	115.0	99.2	94.1
82.5°	82.1	74.9	83.6	72.1	69.0
85°	52.3	44.6	47.0	41.8	39.2
87.5°	30.8	25.5	25.8	24.5	21.4
90°	18.3	22.5	24.3	28.5	23.4
92.5°	34.9	33.0	32.5	38.1	36.4
95°	63.2	82.4	47.5	46.7	52.5
97.5°	86.7	140.4	262.8	79.8	67.1
100°	105.2	169.1	515.4	154.6	101.5
102.5°	123.8	193.0	694.3	397.3	216.4
105°	151.6	220.6	786.3	997.1	658.1
107.5°	182.1	231.3	751.1	1449.9	1355.7
110°	200.6	248.5	730.4	1523.4	1634.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	221.3	269.2	709.8	1480.5	1668.8
115°	249.6	297.5	678.8	1397.2	1630.1
117.5°	280.9	328.5	671.1	1307.0	1546.7
120°	302.9	349.2	657.3	1238.4	1488.2
122.5°	320.1	367.7	638.0	1179.5	1409.0
125°	347.6	393.9	640.1	1108.2	1307.5
127.5°	370.0	419.1	638.4	1025.1	1222.4
130°	383.7	434.2	641.8	967.7	1157.0
132.5°	396.7	447.2	637.6	942.9	1098.5
135°	421.5	467.8	636.6	910.6	1045.2
137.5°	443.0	492.6	636.6	874.9	990.1
140°	460.2	506.5	636.6	854.0	959.1
142.5°	477.4	520.3	640.0	829.8	928.2
145°	498.9	541.0	640.9	793.3	877.4
147.5°	524.7	561.7	646.0	767.1	831.8
150°	541.9	575.6	649.5	749.6	804.3
152.5°	559.1	589.4	649.5	735.6	780.2
155°	585.0	606.0	653.8	719.0	752.7
157.5°	605.6	625.8	658.9	708.5	732.9
160°	619.4	636.2	662.4	701.6	722.6
162.5°	629.7	646.5	665.8	698.0	712.3
165°	649.5	657.9	671.0	688.5	701.1
167.5°	660.7	668.2	675.3	684.0	691.6
170°	671.0	675.2	675.3	684.0	688.2
172.5°	674.4	682.0	678.7	680.5	684.7
175°	683.9	688.1	683.9	679.5	675.3
177.5°	683.9	687.2	683.9	683.8	680.4
180°	683.9	683.9	683.9	683.9	683.9

(END OF REPORT)