

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: P645021

Luminaire Tested: OMN4DIP-SR4F0-50D75U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645021  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: OMN4DIP-SR4F0-50D75U940-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

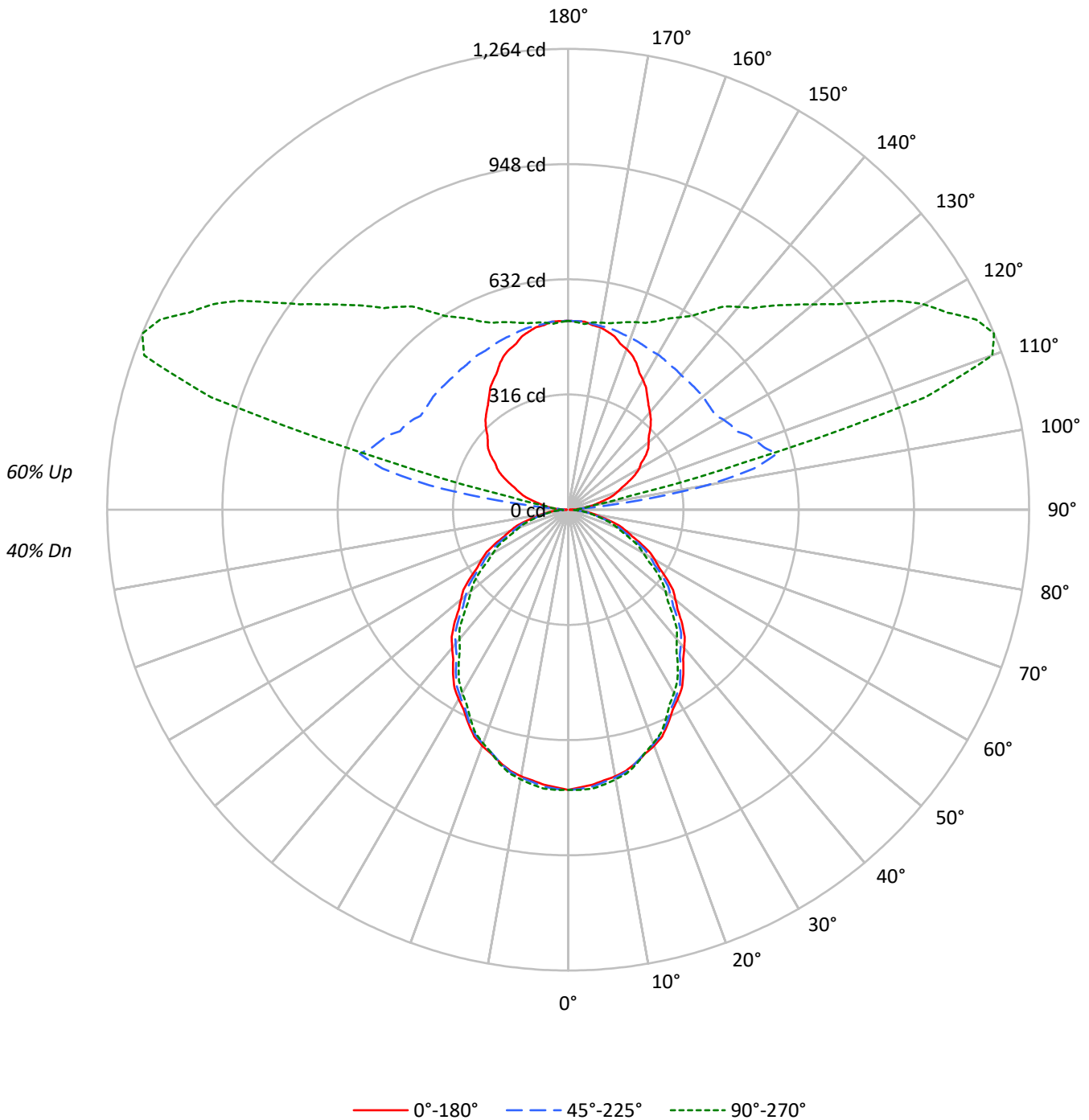
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4657.6 lumens  
Efficiency: N/A  
Efficacy: 132.7 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 35.1  
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									
RC	80									70									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	95	95	95	95	78	78	78	62	62	62	47	47	47	40																			
1	96	91	88	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34																			
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	34	28																			
3	79	70	63	57	72	64	58	53	53	48	45	42	39	37	33	30	29	24																			
4	73	62	54	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21																			
5	67	55	47	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18																			
6	61	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16																			
7	57	45	37	32	52	41	34	29	34	29	25	28	24	21	22	19	17	14																			
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13																			
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	19	16	14	12																			
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	13	11																			

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

	0°	45°	90°
0°	12411	12411	12411
5°	12272	12357	12443
10°	12175	12226	12311
15°	12010	12010	12080
20°	11842	11753	11716
25°	11533	11441	11291
30°	11192	11037	10821
35°	10843	10575	10328
40°	10427	10117	9765
45°	10076	9695	9218
50°	9640	9221	8749
55°	9272	8802	8273
60°	8848	8376	7666
65°	8390	7790	7194
70°	7950	7209	6713
75°	7436	6588	6263
80°	6806	6025	5737
85°	6391	5613	5224

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10076 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.3	1.6
10°-20°	202.9	4.4
20°-30°	295.1	6.3
30°-40°	335.6	7.2
40°-50°	327.2	7.0
50°-60°	279.3	6.0
60°-70°	203.0	4.4
70°-80°	114.8	2.5
80°-90°	36.5	0.8
90°-100°	68.1	1.5
100°-110°	456.1	9.8
110°-120°	617.4	13.3
120°-130°	502.1	10.8
130°-140°	403.3	8.7
140°-150°	317.8	6.8
150°-160°	232.4	5.0
160°-170°	144.4	3.1
170°-180°	49.2	1.1
0°-30°	570.3	12.2
0°-40°	905.9	19.4
0°-60°	1512.4	32.5
0°-90°	1866.7	40.1
90°-120°	1141.7	24.5
90°-150°	2364.9	50.8
90°-180°	2791.0	59.9
0°-180°	4657.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	757	768	762	762	768	72
15°	718	728	718	718	723	203
25°	647	654	642	631	634	298
35°	550	552	536	524	524	343
45°	441	439	425	410	404	340
55°	329	328	313	298	294	294
65°	220	218	204	191	188	218
75°	119	115	106	101	100	127
85°	34	30	30	29	28	37
90°	4	8	13	15	15	5
95°	34	53	29	33	38	35
105°	106	158	592	754	498	112
115°	182	219	509	1056	1234	181
125°	259	294	480	837	990	230
135°	319	354	482	689	791	246
145°	378	410	485	601	664	237
155°	443	459	495	544	570	203
165°	492	498	508	521	531	138
175°	518	521	518	514	511	49
180°	518	518	518	518	518	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	768.7	768.7	768.7	768.7	768.7
2.5°	762.0	771.8	766.2	766.3	769.5
5°	757.2	768.4	762.4	761.5	767.7
7.5°	749.2	760.3	753.2	752.1	760.1
10°	742.6	752.8	745.7	743.8	750.9
12.5°	733.4	743.6	736.5	733.7	740.9
15°	718.5	727.7	718.5	717.6	722.7
17.5°	701.8	709.7	699.0	695.6	699.5
20°	689.2	696.4	684.0	678.8	681.9
22.5°	673.3	680.5	667.3	659.6	663.5
25°	647.4	653.5	642.2	630.7	633.8
27.5°	619.6	624.3	612.9	601.2	602.2
30°	600.3	603.4	592.0	579.4	580.4
32.5°	580.2	582.5	570.2	556.8	557.0
35°	550.1	552.2	536.5	524.0	524.0
37.5°	518.1	519.3	502.6	489.0	487.6
40°	494.7	496.7	480.0	466.4	463.3
42.5°	472.9	473.3	458.3	444.6	440.7
45°	441.3	439.3	424.6	409.8	403.7
47.5°	407.3	407.3	390.5	375.7	370.0
50°	383.8	383.8	367.1	352.4	348.3
52.5°	362.1	361.3	345.3	330.6	324.8
55°	329.4	328.4	312.7	298.0	293.9
57.5°	294.9	294.9	280.3	264.5	260.0
60°	274.0	274.0	259.4	243.5	237.4
62.5°	251.4	250.6	235.9	221.8	218.2
65°	219.6	217.6	203.9	191.3	188.3
67.5°	189.3	187.3	172.8	162.7	160.6
70°	168.4	166.3	152.7	144.3	142.2
72.5°	148.3	145.4	133.5	126.7	124.7
75°	119.2	115.1	105.6	101.4	100.4
77.5°	91.6	84.7	80.7	77.8	76.8
80°	73.2	67.1	64.8	62.7	61.7
82.5°	57.3	51.2	50.6	49.3	48.3
85°	34.5	30.4	30.3	29.3	28.2
87.5°	15.1	13.4	14.3	14.7	14.7
90°	4.2	8.4	12.8	15.0	15.0
92.5°	15.3	16.3	18.9	24.6	26.4
95°	34.4	52.6	29.2	32.6	37.9
97.5°	53.6	97.0	194.4	58.4	49.9
100°	69.2	120.3	386.4	114.2	75.9
102.5°	84.0	137.6	521.8	299.5	163.7
105°	106.2	158.3	591.5	754.0	498.3
107.5°	129.4	168.3	564.8	1096.9	1026.5
110°	144.2	181.4	549.2	1152.5	1237.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	159.8	197.0	533.6	1120.0	1263.5
115°	182.2	219.4	509.1	1055.9	1234.2
117.5°	206.3	242.9	503.2	987.6	1171.1
120°	224.6	258.6	492.8	935.7	1126.8
122.5°	236.8	274.1	479.8	891.1	1066.8
125°	259.4	294.4	479.8	837.2	990.0
127.5°	277.2	313.7	480.4	774.6	925.5
130°	287.6	325.8	483.0	732.7	876.0
132.5°	299.8	338.0	482.2	713.9	831.7
135°	319.1	354.2	482.0	689.4	791.3
137.5°	335.4	373.0	482.0	662.4	749.7
140°	348.5	383.5	482.0	646.6	726.2
142.5°	361.5	394.0	484.6	628.3	702.8
145°	377.8	409.6	485.2	600.7	664.3
147.5°	397.3	425.3	489.1	580.8	629.8
150°	410.3	435.8	491.7	567.6	609.0
152.5°	423.4	446.3	491.7	557.0	590.7
155°	442.9	458.8	495.0	544.4	569.9
157.5°	458.5	473.8	498.9	536.4	554.9
160°	468.9	481.7	501.5	531.2	547.1
162.5°	476.8	489.5	504.1	528.5	539.3
165°	491.7	498.1	508.0	521.3	530.8
167.5°	500.2	505.9	511.3	517.9	523.7
170°	508.0	511.2	511.3	517.9	521.0
172.5°	510.6	516.4	513.9	515.3	518.4
175°	517.8	521.0	517.8	514.5	511.3
177.5°	517.8	520.3	517.8	517.7	515.2
180°	517.8	517.8	517.8	517.8	517.8

(END OF REPORT)