

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: P644961

Luminaire Tested: OMN4DIP-SR4F0-50D25U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644961  
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-SR4F0-50D25U940-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

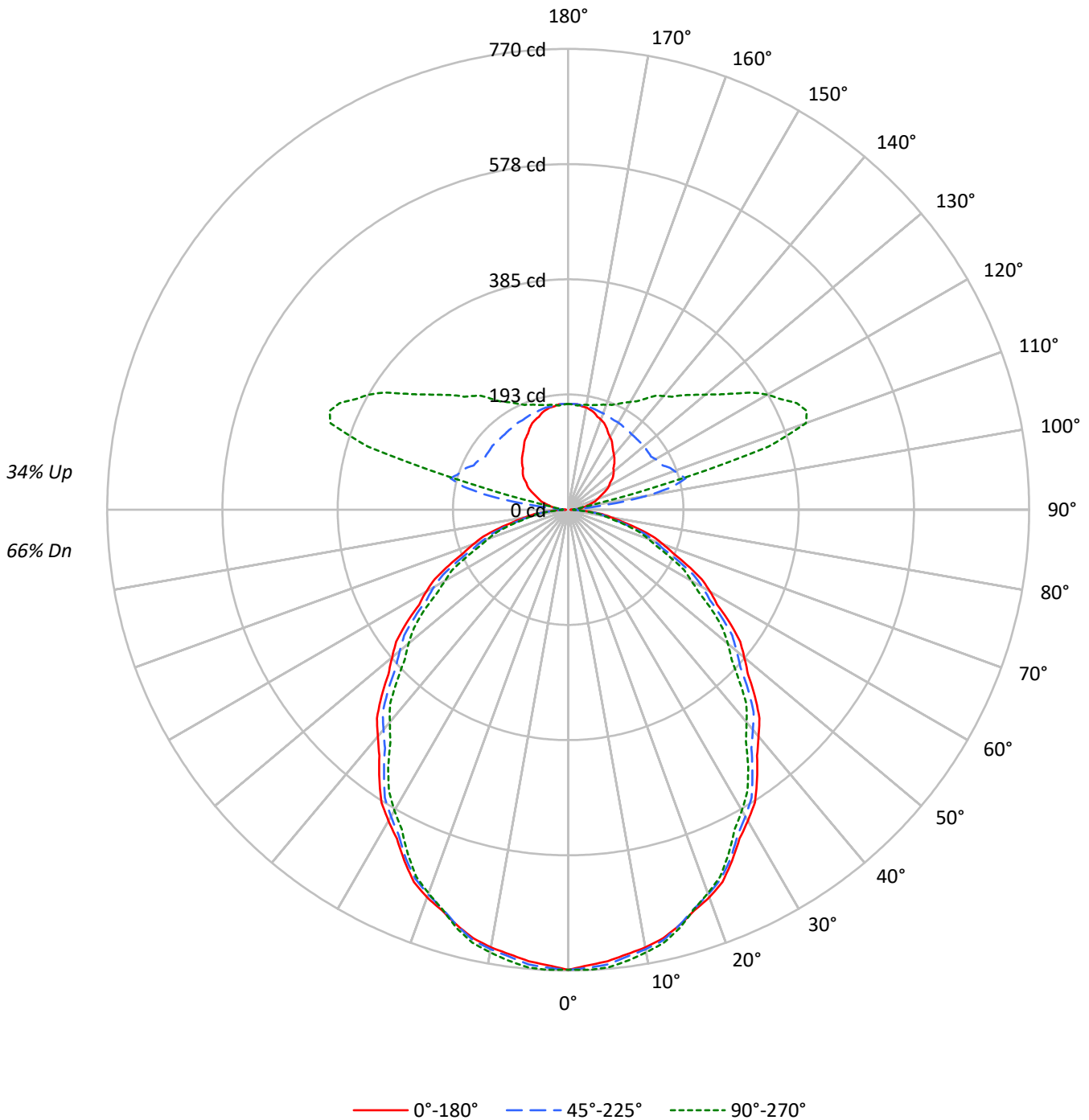
Lumens per Lamp: N/A  
Luminaire Lumens: 2825.1 lumens  
Efficiency: N/A  
Efficacy: 125.0 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 22.6  
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: P644961

CATALOG NUMBER: OMN4DIP-SR4F0-50D25U940-FLLOOB-1DUDD-WW

### Luminous Intensity Polar Plot





TEST NUMBER: P644961

CATALOG NUMBER: OMN4DIP-SR4F0-50D25U940-FLLOOB-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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	93	85	79	73	87	80	75	70	71	67	63	63	60	57	55	53	51	47
3	85	75	67	61	79	71	64	59	63	58	53	56	52	48	49	46	43	40
4	77	66	58	52	73	63	56	50	56	50	46	50	45	42	44	41	38	34
5	71	59	51	45	67	56	49	43	50	44	40	45	40	36	40	36	33	30
6	66	53	45	39	62	51	43	38	46	39	35	41	36	32	36	32	29	26
7	61	48	40	35	57	46	39	33	41	35	31	37	32	28	33	29	26	23
8	57	44	36	31	53	42	35	30	38	32	27	34	29	25	31	26	23	21
9	53	40	33	28	50	38	31	27	35	29	25	31	26	23	28	24	21	19
10	49	37	30	25	47	35	29	24	32	26	22	29	24	21	26	22	19	17

**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



TEST NUMBER: P644961

CATALOG NUMBER: OMN4DIP-SR4F0-50D25U940-FLLOOB-1DUDD-WW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.3	2.6
10°-20°	202.9	7.2
20°-30°	295.1	10.4
30°-40°	335.6	11.9
40°-50°	327.2	11.6
50°-60°	279.3	9.9
60°-70°	203.0	7.2
70°-80°	114.8	4.1
80°-90°	35.7	1.3
90°-100°	26.2	0.9
100°-110°	157.4	5.6
110°-120°	211.8	7.5
120°-130°	172.0	6.1
130°-140°	137.8	4.9
140°-150°	108.5	3.8
150°-160°	79.4	2.8
160°-170°	49.3	1.7
170°-180°	16.8	0.6
0°-30°	570.3	20.2
0°-40°	905.9	32.1
0°-60°	1512.4	53.5
0°-90°	1865.9	66.0
90°-120°	395.4	14.0
90°-150°	813.7	28.8
90°-180°	959.0	33.9
0°-180°	2825.1	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	6	8	9	9	5
95°	17	21	12	13	14	16
105°	40	56	203	258	170	42
115°	64	76	174	360	421	64
125°	90	102	164	286	338	80
135°	109	121	165	235	270	84
145°	129	140	166	205	227	81
155°	151	157	169	186	195	69
165°	168	170	174	178	181	47
175°	177	178	177	176	175	17
180°	177	177	177	177	177	

TEST NUMBER: P644961

CATALOG NUMBER: OMN4DIP-SR4F0-50D25U940-FLLOOB-1DUDD-WW

**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	13.0	13.4	13.4	13.4
90°	4.2	6.3	8.5	8.6	8.6
92.5°	10.2	9.0	9.5	11.3	11.3
95°	17.3	20.8	12.0	13.2	14.3
97.5°	23.1	35.9	68.3	21.2	17.7
100°	28.4	43.9	133.3	39.7	26.6
102.5°	32.9	49.2	179.6	102.9	56.0
105°	39.7	56.1	203.4	258.1	170.1
107.5°	47.5	59.6	194.2	375.2	350.5
110°	52.0	64.0	188.9	394.2	422.5



TEST NUMBER: P644961

CATALOG NUMBER: OMN4DIP-SR4F0-50D25U940-FLLOOB-1DUDD-WW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	57.3	69.4	183.6	383.1	431.4
115°	64.3	76.3	174.5	360.5	421.4
117.5°	72.5	84.3	172.5	337.2	399.9
120°	78.7	89.7	168.9	319.5	384.7
122.5°	82.4	95.0	164.5	304.3	364.3
125°	89.9	101.9	164.5	285.8	338.0
127.5°	95.3	108.3	164.7	264.5	316.0
130°	98.9	111.9	165.6	250.2	299.1
132.5°	102.5	115.6	164.8	243.8	284.0
135°	109.0	120.9	164.6	235.4	270.2
137.5°	114.5	127.4	164.6	226.2	256.0
140°	119.0	130.9	164.6	220.8	248.0
142.5°	123.4	134.5	165.5	214.5	240.0
145°	129.0	139.9	165.7	205.1	226.8
147.5°	135.7	145.2	167.0	198.3	215.0
150°	140.1	148.8	167.9	193.8	207.9
152.5°	144.6	152.4	167.9	190.2	201.7
155°	151.2	156.7	169.0	185.9	194.6
157.5°	156.6	161.8	170.3	183.2	189.5
160°	160.1	164.5	171.2	181.4	186.8
162.5°	162.8	167.1	172.1	180.4	184.1
165°	167.9	170.1	173.5	178.0	181.2
167.5°	170.8	172.7	174.6	176.8	178.8
170°	173.5	174.5	174.6	176.8	177.9
172.5°	174.4	176.3	175.5	175.9	177.0
175°	176.8	177.9	176.8	175.7	174.6
177.5°	176.8	177.7	176.8	176.8	175.9
180°	176.8	176.8	176.8	176.8	176.8

(END OF REPORT)