

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: P644863

Luminaire Tested: OMN4DIP-SR4F0-50D100U935-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644863
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-SR4F0-50D100U935-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

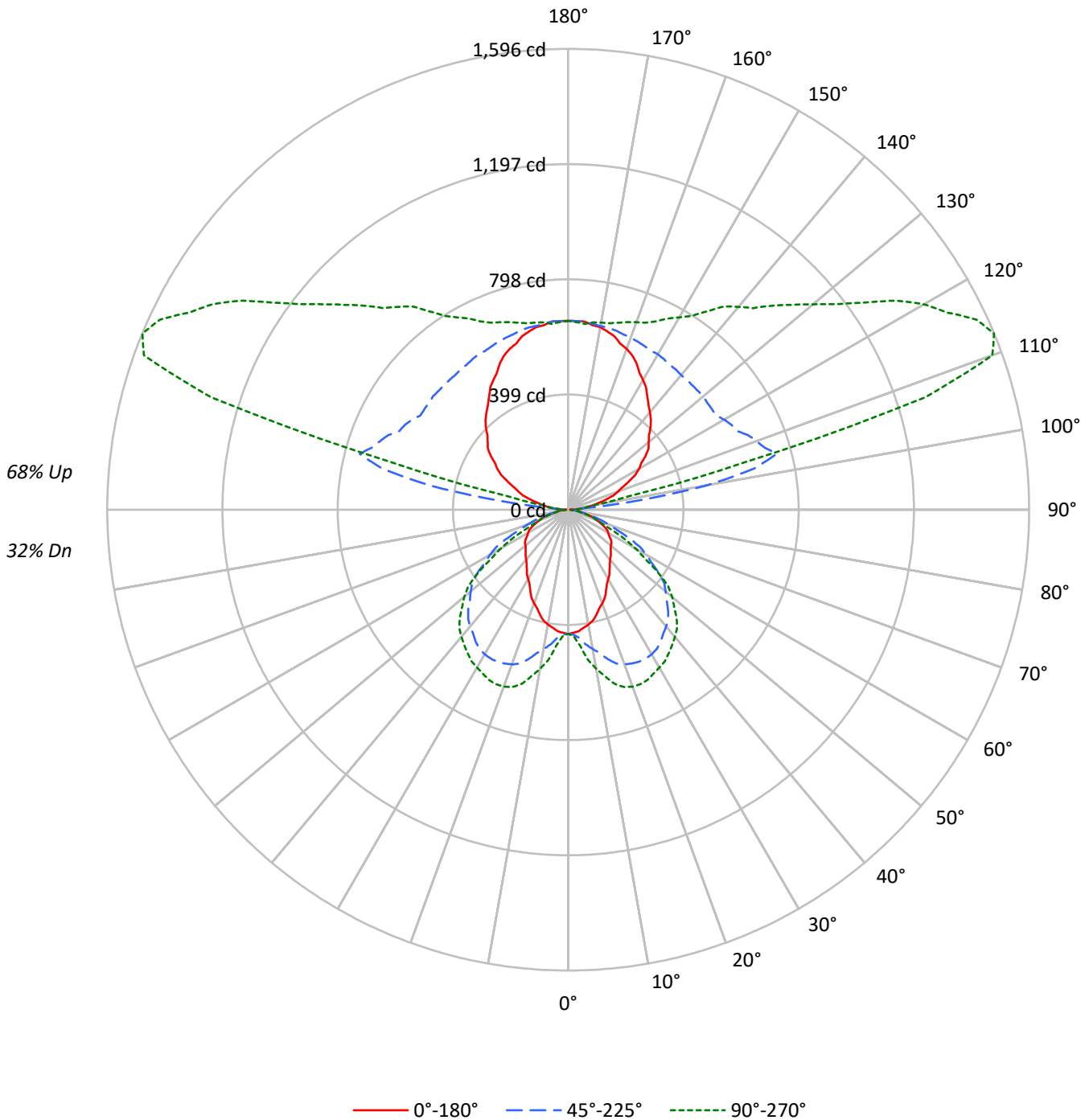
Lumens per Lamp: N/A
Luminaire Lumens: 5177.2 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.3
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: P644863

CATALOG NUMBER: OMN4DIP-SR4F0-50D100U935-CLBOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644863

CATALOG NUMBER: OMN4DIP-SR4F0-50D100U935-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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	39	39	39	32
1	94	90	86	82	84	81	78	75	64	62	60	49	48	46	35	34	33	27
2	85	78	72	67	77	71	66	61	56	53	50	43	41	39	31	29	28	23
3	78	69	62	56	70	62	56	51	49	45	42	38	35	33	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	14
6	60	48	40	34	53	43	37	32	35	30	26	27	23	21	20	17	15	12
7	55	43	35	30	49	39	32	28	31	26	23	24	21	18	18	15	14	11
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	16	14	12	9
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	15	12	11	8
10	44	32	25	21	40	29	23	19	24	19	16	19	15	13	14	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6943	6943	6943
5°	6840	7229	7650
10°	6624	8034	9165
15°	6302	8976	10447
20°	5928	9794	11203
25°	5523	10350	11580
30°	5164	10776	11764
35°	4928	10998	11964
40°	4763	11129	12119
45°	4772	11166	12125
50°	4848	11052	11781
55°	5067	10838	10697
60°	5167	10075	8686
65°	5234	8825	6380
70°	5004	6939	4957
75°	4492	5178	4180
80°	3812	4091	3347
85°	3705	3335	2779

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12125 cd/sqm



TEST NUMBER: P644863

CATALOG NUMBER: OMN4DIP-SR4F0-50D100U935-CLBOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.1	0.9
10°-20°	146.6	2.8
20°-30°	243.5	4.7
30°-40°	307.1	5.9
40°-50°	328.3	6.3
50°-60°	289.8	5.6
60°-70°	186.0	3.6
70°-80°	82.5	1.6
80°-90°	22.9	0.4
90°-100°	86.0	1.7
100°-110°	576.5	11.1
110°-120°	780.5	15.1
120°-130°	634.8	12.3
130°-140°	509.3	9.8
140°-150°	401.4	7.8
150°-160°	293.5	5.7
160°-170°	182.3	3.5
170°-180°	62.2	1.2
0°-30°	434.1	8.4
0°-40°	741.3	14.3
0°-60°	1359.4	26.3
0°-90°	1650.7	31.9
90°-120°	1443.0	27.9
90°-150°	2988.5	57.7
90°-180°	3526.0	68.1
0°-180°	5177.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	430	430	430	430	430	
5°	422	435	446	461	472	40
15°	377	435	537	602	625	106
25°	310	420	581	635	650	143
35°	250	384	558	594	607	157
45°	209	328	489	519	531	161
55°	180	258	385	387	380	160
65°	137	173	231	188	167	134
75°	72	80	83	71	67	77
85°	20	17	18	16	15	21
90°	7	11	14	18	16	6
95°	44	68	38	40	47	45
105°	134	202	747	952	629	142
115°	231	278	645	1334	1559	230
125°	328	372	608	1058	1250	291
135°	403	447	609	871	999	310
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	



TEST NUMBER: P644863

CATALOG NUMBER: OMN4DIP-SR4F0-50D100U935-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	430.0	430.0	430.0	430.0	430.0
2.5°	426.8	433.1	433.2	435.7	438.8
5°	422.0	434.7	446.0	461.2	472.0
7.5°	412.0	434.7	470.8	506.2	523.8
10°	404.0	435.3	490.0	537.5	559.0
12.5°	393.6	435.1	509.2	566.4	591.0
15°	377.0	434.7	537.0	601.5	625.0
17.5°	357.8	432.9	558.8	623.5	644.0
20°	345.0	431.0	570.0	631.5	652.0
22.5°	330.6	426.8	576.4	635.4	654.4
25°	310.0	420.5	581.0	635.3	650.0
27.5°	289.8	411.4	581.2	627.3	639.8
30°	277.0	404.1	578.0	619.3	631.0
32.5°	265.8	396.0	571.6	609.7	622.2
35°	250.0	384.0	558.0	594.3	607.0
37.5°	236.4	370.2	540.8	576.1	591.0
40°	226.0	359.0	528.0	563.3	575.0
42.5°	218.0	347.1	512.8	547.2	557.4
45°	209.0	328.3	489.0	519.3	531.0
47.5°	199.4	308.9	461.6	490.2	497.8
50°	193.0	294.7	440.0	466.1	469.0
52.5°	189.0	279.7	419.2	435.6	436.2
55°	180.0	258.2	385.0	386.8	380.0
57.5°	168.0	233.1	341.6	331.8	315.4
60°	160.0	215.7	312.0	292.5	269.0
62.5°	152.0	199.1	280.8	249.2	221.8
65°	137.0	173.2	231.0	187.5	167.0
67.5°	119.6	144.6	181.4	140.3	126.6
70°	106.0	125.6	147.0	114.8	105.0
72.5°	93.2	106.5	119.0	94.9	89.8
75°	72.0	79.8	83.0	70.9	67.0
77.5°	53.0	53.4	57.6	50.0	48.0
80°	41.0	39.0	44.0	38.0	36.0
82.5°	31.4	28.7	32.0	27.6	26.4
85°	20.0	17.1	18.0	16.0	15.0
87.5°	11.8	10.3	10.8	10.8	9.7
90°	7.0	11.0	14.2	18.3	16.3
92.5°	19.3	20.9	23.3	29.9	31.2
95°	43.9	68.1	37.9	40.2	47.2
97.5°	68.2	124.0	245.6	73.3	62.7
100°	87.1	152.6	488.3	144.8	95.6
102.5°	106.1	175.5	659.4	378.1	206.7
105°	134.5	201.9	747.4	951.9	629.2
107.5°	163.9	213.6	713.6	1384.9	1296.3
110°	182.8	230.1	693.9	1455.2	1562.8



TEST NUMBER: P644863

CATALOG NUMBER: OMN4DIP-SR4F0-50D100U935-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	202.6	249.9	674.2	1414.1	1595.7
115°	231.2	278.5	644.6	1334.4	1558.7
117.5°	261.4	308.1	637.2	1248.2	1478.9
120°	283.7	327.9	624.0	1182.7	1422.9
122.5°	300.1	346.8	606.7	1126.3	1347.3
125°	327.9	372.1	607.5	1058.2	1250.2
127.5°	350.7	396.6	607.4	979.0	1168.8
130°	363.9	412.2	610.7	925.3	1106.3
132.5°	378.8	427.0	609.1	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)