

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: P644869

Luminaire Tested: OMN4DIP-SR4F0-50D100U940-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644869
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-SR4F0-50D100U940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

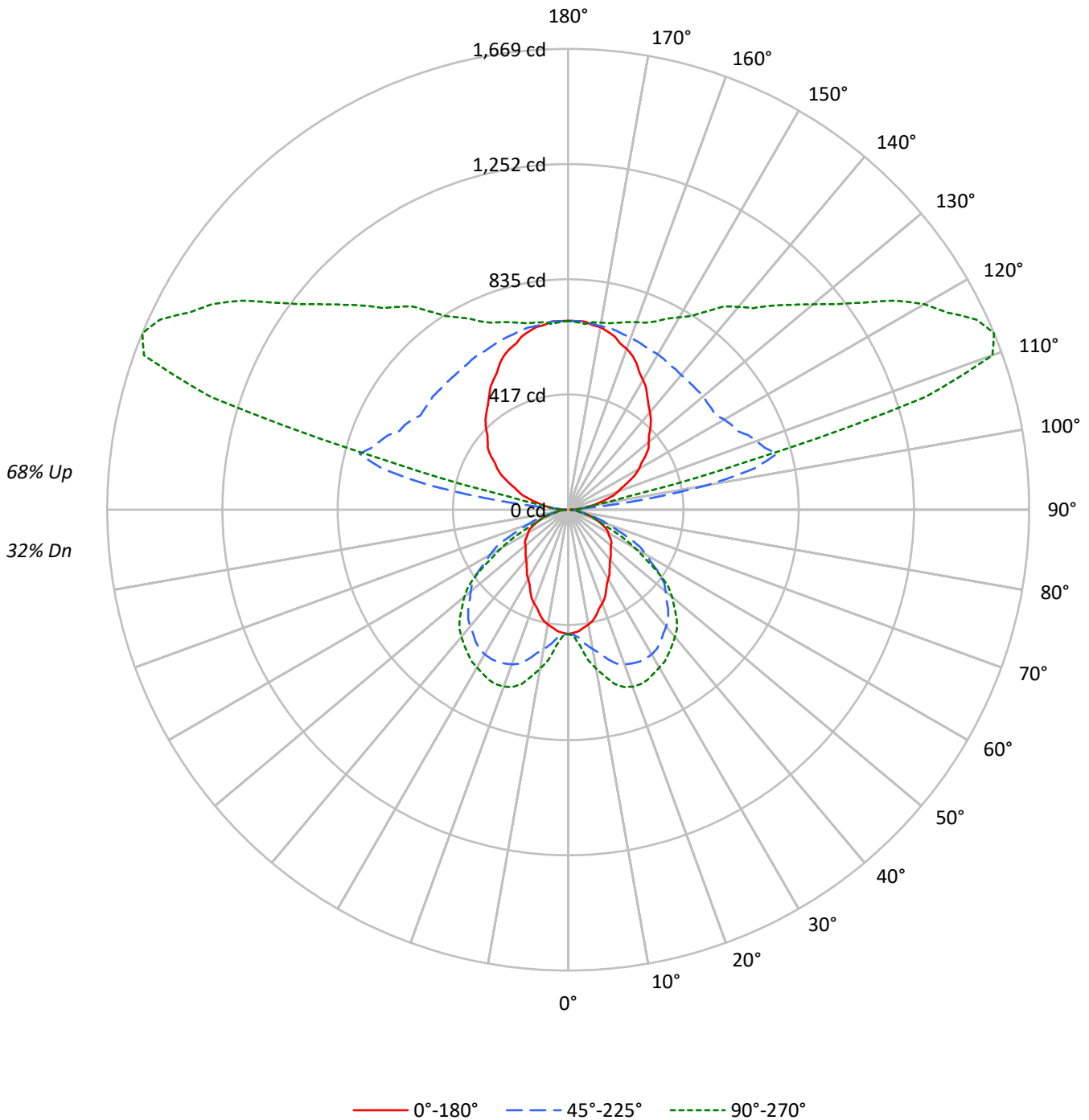
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5414.5 lumens
Efficiency: N/A
Efficacy: 125.0 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

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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									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	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°	7261	7261	7261
5°	7152	7559	8000
10°	6927	8402	9584
15°	6591	9387	10927
20°	6199	10242	11716
25°	5776	10824	12111
30°	5401	11270	12303
35°	5154	11503	12512
40°	4983	11639	12676
45°	4991	11677	12680
50°	5069	11560	12321
55°	5301	11336	11187
60°	5402	10537	9084
65°	5475	9230	6674
70°	5235	7256	5183
75°	4697	5415	4373
80°	3989	4277	3505
85°	3872	3483	2908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12680 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.1	0.9
10°-20°	153.3	2.8
20°-30°	254.6	4.7
30°-40°	321.2	5.9
40°-50°	343.4	6.3
50°-60°	303.1	5.6
60°-70°	194.5	3.6
70°-80°	86.3	1.6
80°-90°	23.9	0.4
90°-100°	90.0	1.7
100°-110°	602.9	11.1
110°-120°	816.3	15.1
120°-130°	663.9	12.3
130°-140°	532.7	9.8
140°-150°	419.8	7.8
150°-160°	306.9	5.7
160°-170°	190.7	3.5
170°-180°	65.0	1.2
0°-30°	454.0	8.4
0°-40°	775.2	14.3
0°-60°	1421.7	26.3
0°-90°	1726.4	31.9
90°-120°	1509.2	27.9
90°-150°	3125.5	57.7
90°-180°	3688.0	68.1
0°-180°	5414.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	450	450	450	450	450	
5°	441	455	466	482	494	41
15°	394	455	562	629	654	110
25°	324	440	608	664	680	149
35°	262	402	584	622	635	164
45°	219	343	511	543	555	169
55°	188	270	403	405	397	167
65°	143	181	242	196	175	140
75°	75	84	87	74	70	80
85°	21	18	19	17	16	22
90°	7	12	15	19	17	6
95°	46	71	40	42	49	47
105°	141	211	782	996	658	149
115°	242	291	674	1396	1630	240
125°	343	389	635	1107	1308	305
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°	449.7	449.7	449.7	449.7	449.7
2.5°	446.4	452.9	453.1	455.6	458.9
5°	441.3	454.6	466.4	482.4	493.6
7.5°	430.9	454.6	492.4	529.4	547.8
10°	422.5	455.2	512.5	562.1	584.6
12.5°	411.6	455.0	532.5	592.3	618.1
15°	394.3	454.6	561.6	629.1	653.7
17.5°	374.2	452.7	584.4	652.1	673.5
20°	360.8	450.8	596.1	660.4	681.9
22.5°	345.8	446.4	602.8	664.6	684.4
25°	324.2	439.8	607.6	664.5	679.8
27.5°	303.1	430.3	607.8	656.0	669.1
30°	289.7	422.6	604.5	647.7	659.9
32.5°	278.0	414.2	597.8	637.6	650.7
35°	261.5	401.6	583.6	621.5	634.8
37.5°	247.2	387.1	565.6	602.6	618.1
40°	236.4	375.4	552.2	589.1	601.4
42.5°	228.0	363.0	536.3	572.3	583.0
45°	218.6	343.3	511.4	543.1	555.3
47.5°	208.5	323.1	482.8	512.6	520.6
50°	201.8	308.2	460.2	487.4	490.5
52.5°	197.7	292.6	438.4	455.6	456.2
55°	188.3	270.1	402.7	404.6	397.4
57.5°	175.7	243.8	357.3	347.0	329.9
60°	167.3	225.6	326.3	305.9	281.3
62.5°	159.0	208.3	293.7	260.6	232.0
65°	143.3	181.1	241.6	196.1	174.7
67.5°	125.1	151.3	189.7	146.7	132.4
70°	110.9	131.3	153.7	120.0	109.8
72.5°	97.5	111.4	124.5	99.2	93.9
75°	75.3	83.5	86.8	74.2	70.1
77.5°	55.4	55.8	60.2	52.2	50.2
80°	42.9	40.8	46.0	39.7	37.7
82.5°	32.8	30.0	33.5	28.8	27.6
85°	20.9	17.8	18.8	16.7	15.7
87.5°	12.3	10.7	11.3	11.3	10.1
90°	7.3	11.5	14.9	19.1	17.1
92.5°	20.2	21.9	24.4	31.3	32.6
95°	45.9	71.3	39.6	42.0	49.4
97.5°	71.3	129.7	256.9	76.7	65.6
100°	91.1	159.6	510.7	151.5	100.0
102.5°	110.9	183.6	689.6	395.5	216.1
105°	140.7	211.1	781.6	995.5	658.1
107.5°	171.4	223.4	746.4	1448.4	1355.7
110°	191.2	240.7	725.7	1521.9	1634.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	211.9	261.3	705.1	1478.9	1668.8
115°	241.8	291.2	674.1	1395.6	1630.1
117.5°	273.4	322.2	666.4	1305.5	1546.7
120°	296.7	342.9	652.6	1236.9	1488.2
122.5°	313.9	362.7	634.6	1177.9	1409.0
125°	342.9	389.2	635.4	1106.7	1307.5
127.5°	366.8	414.7	635.2	1023.9	1222.4
130°	380.6	431.1	638.7	967.7	1157.0
132.5°	396.1	446.6	637.0	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)