

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: P645254

Luminaire Tested: OMN4DP-SR4F0-50D940-CLB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645254
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DP-SR4F0-50D940-CLB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

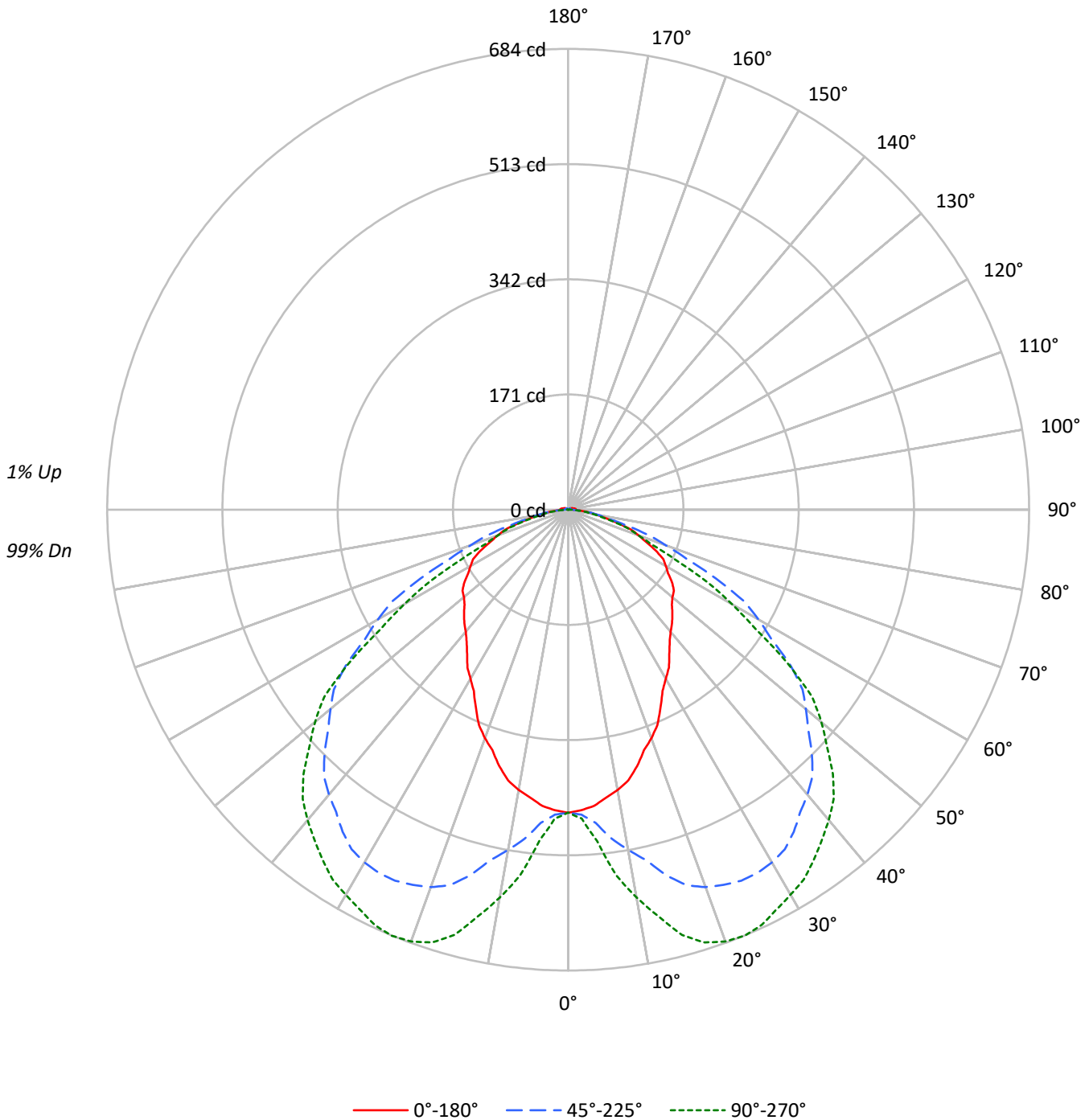
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1739.3 lumens
Efficiency: N/A
Efficacy: 121.6 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: Direct

Input Watts (W): 14.3
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99																				
1	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84																				
2	99	91	85	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70																				
3	91	80	72	66	88	79	71	65	75	69	64	73	67	63	70	65	62	59																				
4	83	71	62	56	80	70	61	55	67	60	54	65	58	53	62	57	53	51																				
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	43																				
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	45	40	38																				
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33																				
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29																				
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26																				
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24																				

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	2.7
10°-20°	153.3	8.8
20°-30°	254.6	14.6
30°-40°	321.2	18.5
40°-50°	343.4	19.7
50°-60°	303.1	17.4
60°-70°	194.5	11.2
70°-80°	86.3	5.0
80°-90°	22.3	1.3
90°-100°	5.9	0.3
100°-110°	3.7	0.2
110°-120°	2.8	0.2
120°-130°	1.8	0.1
130°-140°	0.2	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	454.0	26.1
0°-40°	775.2	44.6
0°-60°	1421.7	81.7
0°-90°	1724.8	99.2
90°-120°	12.5	0.7
90°-150°	14.5	0.8
90°-180°	14.0	0.8
0°-180°	1739.3	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	7	6	6	4	5
95°	12	7	5	3	2	9
105°	7	6	3	1	0	8
115°	5	4	3	1	0	5
125°	3	3	3	1	0	3
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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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	9.9	9.6	8.8	7.5
90°	7.3	7.3	6.3	6.2	4.2
92.5°	9.8	7.4	5.4	4.6	2.5
95°	11.5	7.4	5.2	3.1	2.1
97.5°	10.2	7.2	4.0	2.1	1.0
100°	9.4	6.3	3.1	2.1	1.0
102.5°	8.6	6.3	3.1	1.2	0.2
105°	7.3	6.3	3.1	1.0	0.0
107.5°	7.1	5.3	3.1	1.0	0.0
110°	6.3	5.3	3.1	1.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	6.3	5.3	3.1	1.0	0.0
115°	5.2	4.2	3.1	1.0	0.0
117.5°	5.0	4.2	3.1	1.0	0.0
120°	4.2	4.2	3.1	1.0	0.0
122.5°	4.2	3.4	2.3	1.0	0.0
125°	3.1	3.1	3.1	1.0	0.0
127.5°	2.1	2.9	2.1	0.8	0.0
130°	2.1	2.1	2.1	0.0	0.0
132.5°	0.4	0.4	0.4	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)