

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: P645246

Luminaire Tested: OMN4DP-SR4F0-50D930-CLB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645246
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-SR4F0-50D930-CLB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

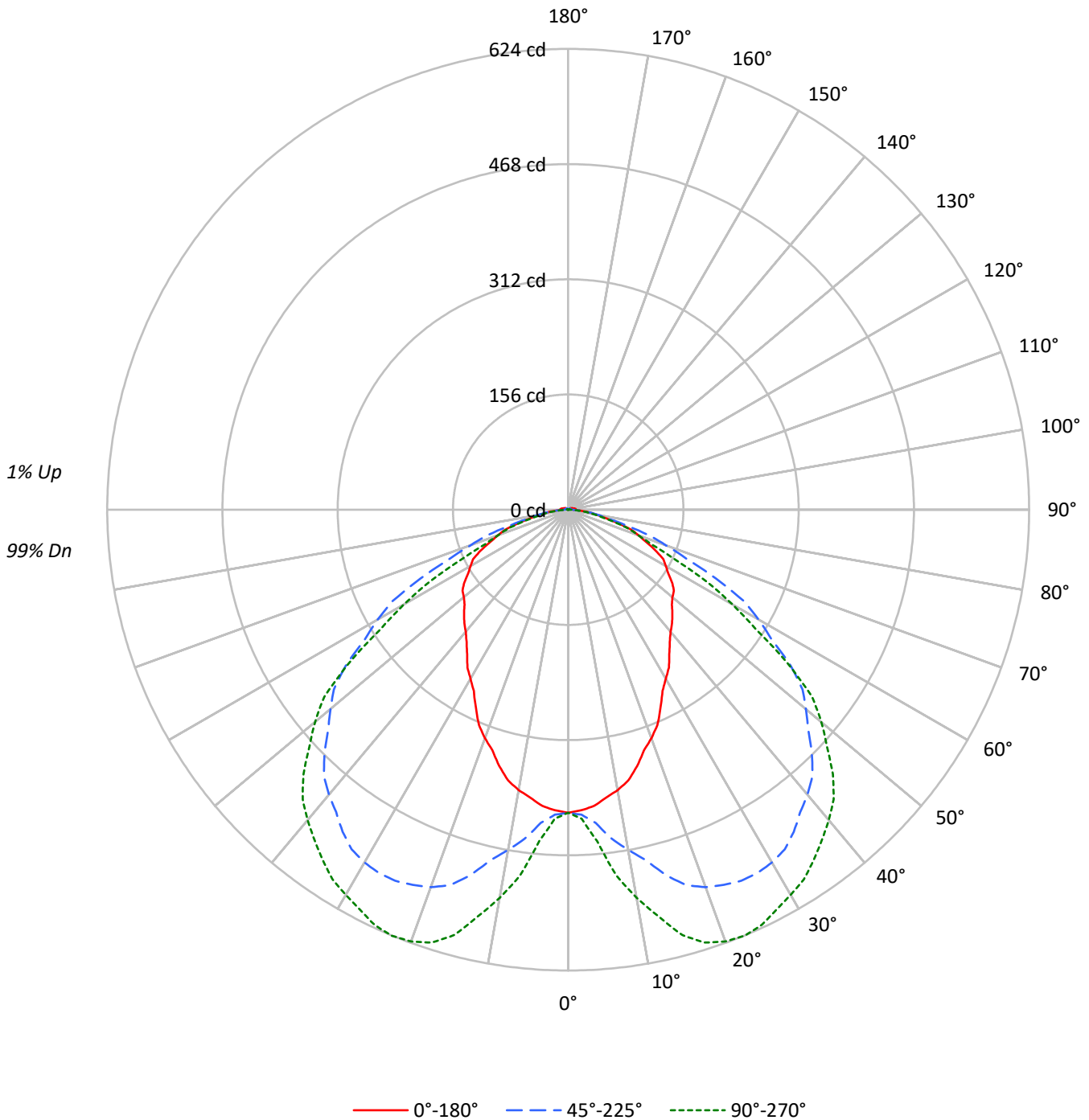
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1587.0 lumens
Efficiency: N/A
Efficacy: 111.0 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: 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					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	50								
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°	6625	6625	6625
5°	6527	6898	7300
10°	6320	7666	8745
15°	6013	8565	9969
20°	5656	9345	10689
25°	5270	9877	11049
30°	4928	10282	11225
35°	4703	10494	11416
40°	4546	10619	11565
45°	4553	10654	11570
50°	4627	10547	11241
55°	4836	10342	10207
60°	4931	9613	8289
65°	4993	8420	6090
70°	4773	6623	4730
75°	4286	4941	3986
80°	3636	3905	3199
85°	3538	3186	2649

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11570 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	2.7
10°-20°	139.8	8.8
20°-30°	232.3	14.6
30°-40°	293.1	18.5
40°-50°	313.3	19.7
50°-60°	276.5	17.4
60°-70°	177.5	11.2
70°-80°	78.7	5.0
80°-90°	20.4	1.3
90°-100°	5.4	0.3
100°-110°	3.4	0.2
110°-120°	2.6	0.2
120°-130°	1.7	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°	414.2	26.1
0°-40°	707.3	44.6
0°-60°	1297.2	81.7
0°-90°	1573.7	99.2
90°-120°	11.4	0.7
90°-150°	13.3	0.8
90°-180°	13.0	0.8
0°-180°	1587.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	403	415	426	440	450	38
15°	360	415	512	574	596	101
25°	296	401	554	606	620	136
35°	239	366	532	567	579	150
45°	199	313	467	496	507	154
55°	172	246	367	369	363	152
65°	131	165	220	179	159	128
75°	69	76	79	68	64	73
85°	19	16	17	15	14	20
90°	7	7	6	6	4	5
95°	10	7	5	3	2	8
105°	7	6	3	1	0	7
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°	410.3	410.3	410.3	410.3	410.3
2.5°	407.3	413.2	413.4	415.7	418.7
5°	402.7	414.8	425.6	440.1	450.4
7.5°	393.1	414.8	449.2	483.0	499.8
10°	385.5	415.4	467.6	512.9	533.4
12.5°	375.6	415.1	485.9	540.4	563.9
15°	359.7	414.8	512.4	574.0	596.4
17.5°	341.4	413.1	533.2	594.9	614.5
20°	329.2	411.3	543.9	602.6	622.1
22.5°	315.5	407.3	550.0	606.3	624.4
25°	295.8	401.2	554.4	606.2	620.2
27.5°	276.5	392.6	554.6	598.6	610.5
30°	264.3	385.6	551.5	590.9	602.1
32.5°	253.6	377.9	545.4	581.8	593.7
35°	238.6	366.4	532.4	567.1	579.2
37.5°	225.6	353.2	516.0	549.8	563.9
40°	215.7	342.5	503.8	537.5	548.7
42.5°	208.0	331.2	489.3	522.2	531.9
45°	199.4	313.3	466.6	495.5	506.7
47.5°	190.3	294.8	440.5	467.7	475.0
50°	184.2	281.2	419.9	444.7	447.5
52.5°	180.3	266.9	400.0	415.7	416.2
55°	171.8	246.4	367.4	369.1	362.6
57.5°	160.3	222.4	326.0	316.6	301.0
60°	152.7	205.9	297.7	279.1	256.7
62.5°	145.0	190.0	267.9	237.8	211.6
65°	130.7	165.2	220.4	178.9	159.4
67.5°	114.1	138.0	173.1	133.9	120.8
70°	101.1	119.8	140.3	109.5	100.2
72.5°	88.9	101.6	113.6	90.5	85.7
75°	68.7	76.2	79.2	67.7	63.9
77.5°	50.6	50.9	55.0	47.7	45.8
80°	39.1	37.3	42.0	36.2	34.4
82.5°	30.0	27.3	30.5	26.3	25.2
85°	19.1	16.3	17.2	15.2	14.3
87.5°	11.3	9.0	8.8	8.0	6.9
90°	6.7	6.7	5.7	5.7	3.8
92.5°	9.0	6.7	5.0	4.2	2.3
95°	10.5	6.8	4.8	2.8	1.9
97.5°	9.4	6.6	3.6	1.9	1.0
100°	8.6	5.8	2.9	1.9	1.0
102.5°	7.8	5.8	2.9	1.1	0.2
105°	6.7	5.7	2.9	0.9	0.0
107.5°	6.5	4.8	2.9	0.9	0.0
110°	5.7	4.8	2.9	0.9	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.7	4.8	2.9	0.9	0.0
115°	4.8	3.8	2.9	0.9	0.0
117.5°	4.6	3.8	2.9	0.9	0.0
120°	3.8	3.8	2.9	0.9	0.0
122.5°	3.8	3.1	2.1	0.9	0.0
125°	2.9	2.9	2.9	0.9	0.0
127.5°	1.9	2.7	1.9	0.7	0.0
130°	1.9	1.9	1.9	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)