

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: P645242

Luminaire Tested: OMN4DP-SR4F0-50D835-FLL-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645242
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DP-SR4F0-50D835-FLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

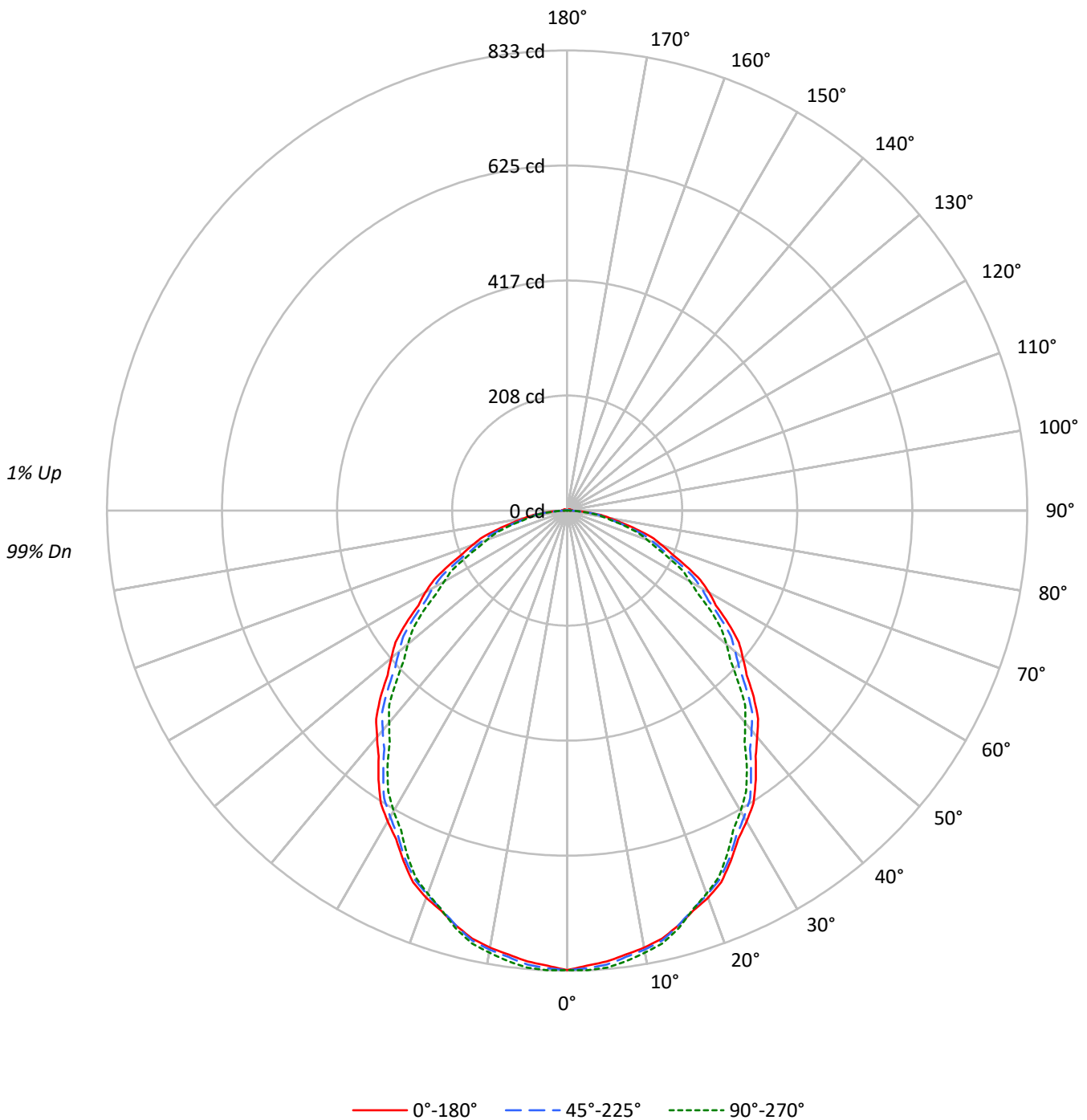
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2028.9 lumens
Efficiency: N/A
Efficacy: 141.9 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: Direct

Input Watts (W): 14.3
Input Voltage (V): 120
Input Current (A_{in}): 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	102	102	102	99																				
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																				
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71																				
3	91	81	73	67	89	79	72	66	76	70	65	73	68	63	71	66	62	60																				
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	63	58	54	52																				
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45																				
6	71	58	50	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40																				
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35																				
8	62	49	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32																				
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29																				
10	54	41	34	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13430	13430	13430
5°	13279	13371	13462
10°	13173	13229	13321
15°	12996	12996	13071
20°	12814	12716	12677
25°	12479	12378	12218
30°	12111	11941	11710
35°	11734	11442	11176
40°	11282	10947	10566
45°	10905	10492	9974
50°	10432	9977	9465
55°	10035	9526	8952
60°	9574	9064	8296
65°	9077	8432	7782
70°	8601	7799	7265
75°	8047	7130	6775
80°	7364	6527	6211
85°	6910	6076	5669

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10905 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	3.9
10°-20°	219.6	10.8
20°-30°	319.3	15.7
30°-40°	363.2	17.9
40°-50°	354.1	17.5
50°-60°	302.2	14.9
60°-70°	219.6	10.8
70°-80°	124.2	6.1
80°-90°	38.2	1.9
90°-100°	4.8	0.2
100°-110°	2.7	0.1
110°-120°	1.6	0.1
120°-130°	0.9	0.0
130°-140°	0.1	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°	617.1	30.4
0°-40°	980.2	48.3
0°-60°	1636.6	80.7
0°-90°	2018.7	99.5
90°-120°	9.1	0.5
90°-150°	10.2	0.5
90°-180°	10.0	0.5
0°-180°	2028.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	819	832	825	824	831	78
15°	778	787	778	776	782	219
25°	700	707	695	682	686	322
35°	595	598	580	567	567	372
45°	478	475	460	444	437	368
55°	356	355	338	322	318	318
65°	238	235	221	207	204	236
75°	129	125	114	110	109	137
85°	37	33	33	32	31	40
90°	4	6	7	6	6	5
95°	9	5	3	3	2	7
105°	6	3	2	1	0	6
115°	3	2	1	0	0	4
125°	2	2	1	0	0	2
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°	831.8	831.8	831.8	831.8	831.8
2.5°	824.5	835.2	829.1	829.1	832.7
5°	819.3	831.5	825.0	824.0	830.6
7.5°	810.7	822.7	815.0	813.9	822.5
10°	803.5	814.5	806.9	804.8	812.5
12.5°	793.5	804.6	796.9	793.9	801.7
15°	777.5	787.4	777.5	776.4	782.0
17.5°	759.3	768.0	756.4	752.7	756.9
20°	745.8	753.5	740.1	734.5	737.8
22.5°	728.6	736.3	722.0	713.7	717.9
25°	700.5	707.1	694.8	682.5	685.8
27.5°	670.4	675.5	663.2	650.5	651.6
30°	649.6	652.9	640.5	627.0	628.1
32.5°	627.8	630.3	617.0	602.5	602.7
35°	595.3	597.5	580.5	567.0	567.0
37.5°	560.6	562.0	543.9	529.1	527.6
40°	535.3	537.5	519.4	504.6	501.3
42.5°	511.7	512.2	495.9	481.1	476.9
45°	477.6	475.4	459.5	443.5	436.8
47.5°	440.7	440.7	422.6	406.6	400.4
50°	415.3	415.3	397.2	381.3	376.8
52.5°	391.8	390.9	373.7	357.7	351.5
55°	356.5	355.4	338.4	322.4	318.0
57.5°	319.1	319.1	303.3	286.2	281.3
60°	296.5	296.5	280.7	263.5	256.9
62.5°	272.1	271.2	255.3	240.0	236.1
65°	237.6	235.4	220.7	207.0	203.7
67.5°	204.8	202.6	187.0	176.0	173.8
70°	182.2	180.0	165.2	156.1	153.9
72.5°	160.5	157.4	144.4	137.1	134.9
75°	129.0	124.6	114.3	109.7	108.6
77.5°	99.1	91.6	87.4	84.2	83.1
80°	79.2	72.6	70.2	67.9	66.8
82.5°	62.0	55.4	54.8	53.4	52.3
85°	37.3	32.9	32.8	31.7	30.6
87.5°	16.3	13.9	14.0	13.8	13.8
90°	4.5	5.6	6.8	5.7	5.7
92.5°	8.1	5.7	5.0	4.7	3.8
95°	9.1	4.6	3.4	3.4	2.3
97.5°	7.9	4.6	3.2	2.0	1.1
100°	7.9	4.6	2.3	1.1	1.1
102.5°	7.0	3.7	2.3	1.1	0.2
105°	5.7	3.4	2.3	1.1	0.0
107.5°	5.4	3.4	2.3	1.1	0.0
110°	4.5	3.4	2.3	1.1	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.5	3.4	2.3	1.1	0.0
115°	3.4	2.3	1.1	0.0	0.0
117.5°	3.4	2.3	1.1	0.0	0.0
120°	3.4	2.3	1.1	0.0	0.0
122.5°	2.5	2.3	1.1	0.0	0.0
125°	2.3	2.3	1.1	0.0	0.0
127.5°	1.1	2.0	1.1	0.0	0.0
130°	1.1	1.1	1.1	0.0	0.0
132.5°	0.2	0.2	0.2	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)