

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: P645208

Luminaire Tested: OMN4DP-SR4F0-100D840-FLL-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645208
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-SR4F0-100D840-FLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

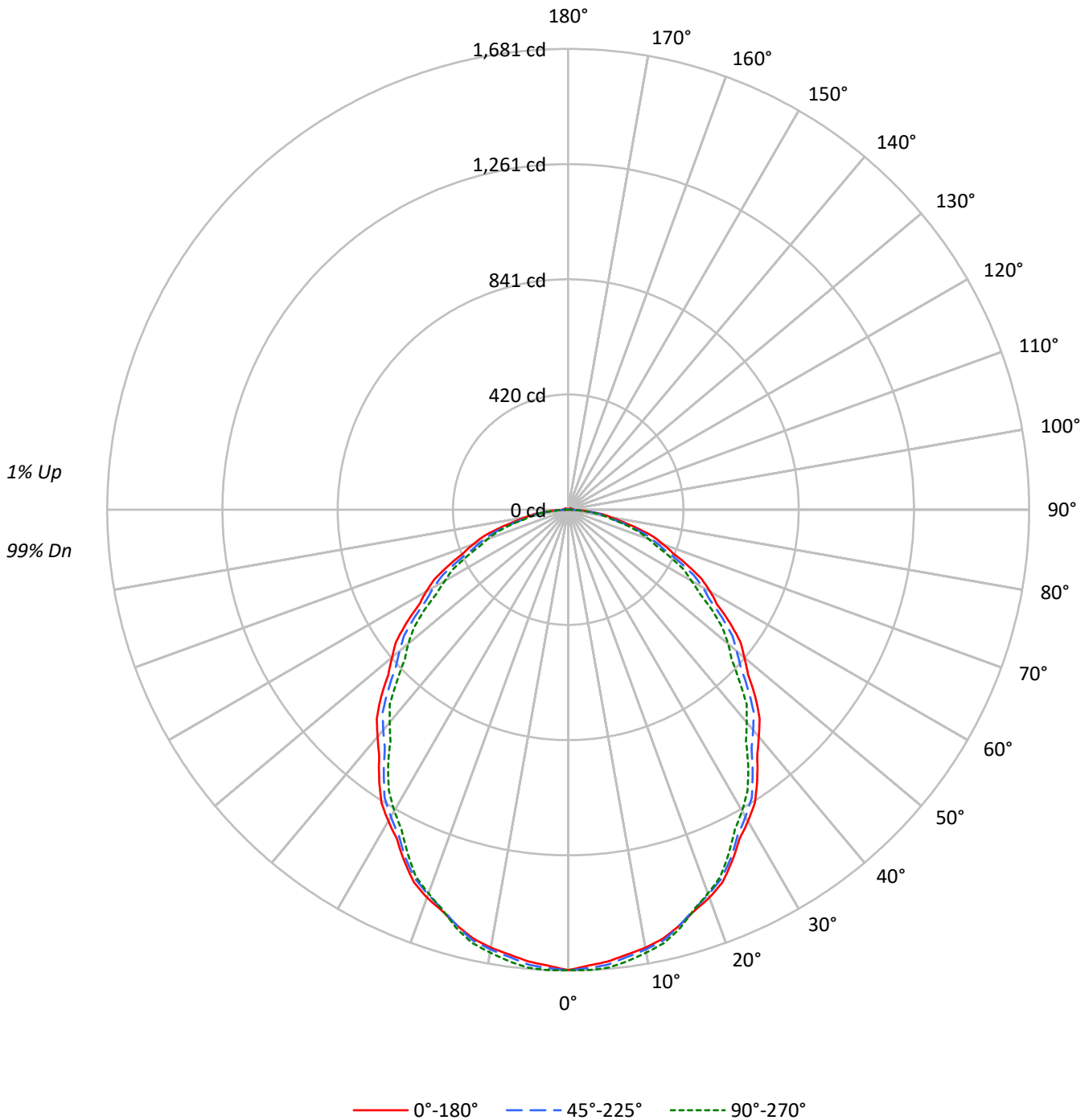
Lumens per Lamp: N/A
Luminaire Lumens: 4096.2 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.9
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	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°	27114	27114	27114
5°	26810	26995	27180
10°	26596	26707	26896
15°	26236	26236	26390
20°	25871	25673	25596
25°	25196	24991	24667
30°	24449	24110	23640
35°	23688	23103	22563
40°	22778	22103	21332
45°	22016	21181	20137
50°	21062	20142	19110
55°	20259	19229	18072
60°	19330	18296	16746
65°	18330	17020	15713
70°	17363	15748	14667
75°	16251	14398	13681
80°	14868	13175	12534
85°	13968	12282	11430

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22016 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.0	3.9
10°-20°	443.3	10.8
20°-30°	644.6	15.7
30°-40°	733.2	17.9
40°-50°	714.9	17.5
50°-60°	610.2	14.9
60°-70°	443.4	10.8
70°-80°	250.8	6.1
80°-90°	77.2	1.9
90°-100°	9.7	0.2
100°-110°	5.4	0.1
110°-120°	3.3	0.1
120°-130°	1.9	0.0
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°	1245.8	30.4
0°-40°	1979.0	48.3
0°-60°	3304.1	80.7
0°-90°	4075.5	99.5
90°-120°	18.5	0.5
90°-150°	20.6	0.5
90°-180°	21.0	0.5
0°-180°	4096.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1679	1679	1679	1679	1679	
5°	1654	1679	1666	1664	1677	157
15°	1570	1590	1570	1568	1579	442
25°	1414	1428	1403	1378	1385	651
35°	1202	1206	1172	1145	1145	750
45°	964	960	928	895	882	742
55°	720	718	683	651	642	642
65°	480	475	446	418	411	476
75°	260	252	231	222	219	276
85°	75	66	66	64	62	81
90°	9	11	14	11	11	9
95°	18	9	7	7	5	14
105°	11	7	5	2	0	13
115°	7	5	2	0	0	8
125°	5	5	2	0	0	4
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°	1679.3	1679.3	1679.3	1679.3	1679.3
2.5°	1664.7	1686.1	1673.8	1674.0	1681.1
5°	1654.2	1678.7	1665.6	1663.6	1677.0
7.5°	1636.8	1660.9	1645.5	1643.1	1660.6
10°	1622.2	1644.5	1629.0	1624.8	1640.5
12.5°	1602.1	1624.4	1608.9	1602.9	1618.5
15°	1569.6	1589.7	1569.6	1567.6	1578.8
17.5°	1533.1	1550.5	1527.1	1519.6	1528.0
20°	1505.7	1521.3	1494.2	1483.0	1489.7
22.5°	1470.9	1486.6	1457.7	1441.0	1449.4
25°	1414.3	1427.7	1402.8	1377.9	1384.6
27.5°	1353.5	1363.8	1338.9	1313.3	1315.6
30°	1311.4	1318.1	1293.2	1265.8	1268.0
32.5°	1267.6	1272.5	1245.6	1216.4	1216.9
35°	1201.8	1206.2	1172.1	1144.7	1144.7
37.5°	1131.9	1134.5	1098.1	1068.3	1065.2
40°	1080.7	1085.2	1048.7	1018.8	1012.1
42.5°	1033.2	1034.1	1001.2	971.3	962.8
45°	964.2	959.7	927.6	895.3	881.9
47.5°	889.7	889.7	853.1	820.9	808.3
50°	838.5	838.5	801.9	769.8	760.8
52.5°	791.0	789.2	754.4	722.2	709.6
55°	719.7	717.5	683.1	651.0	642.0
57.5°	644.3	644.3	612.3	577.8	568.0
60°	598.6	598.6	566.6	532.0	518.6
62.5°	549.3	547.5	515.4	484.6	476.6
65°	479.8	475.3	445.5	418.0	411.3
67.5°	413.5	409.1	377.4	355.4	350.9
70°	367.8	363.4	333.6	315.2	310.7
72.5°	324.0	317.7	291.5	276.8	272.3
75°	260.5	251.5	230.8	221.6	219.3
77.5°	200.1	185.0	176.4	169.9	167.7
80°	159.9	146.5	141.7	137.0	134.8
82.5°	125.2	111.8	110.6	107.8	105.6
85°	75.4	66.5	66.3	63.9	61.7
87.5°	32.9	28.0	28.3	27.9	27.9
90°	9.1	11.4	13.7	11.4	11.4
92.5°	16.5	11.5	10.1	9.6	7.8
95°	18.3	9.3	6.9	6.8	4.6
97.5°	16.0	9.3	6.4	4.1	2.3
100°	16.0	9.3	4.6	2.3	2.3
102.5°	14.2	7.5	4.6	2.2	0.5
105°	11.4	7.0	4.6	2.2	0.0
107.5°	11.0	6.9	4.6	2.2	0.0
110°	9.1	6.9	4.6	2.2	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.1	6.9	4.6	2.2	0.0
115°	6.9	4.6	2.3	0.0	0.0
117.5°	6.9	4.6	2.3	0.0	0.0
120°	6.9	4.6	2.3	0.0	0.0
122.5°	5.0	4.6	2.3	0.0	0.0
125°	4.6	4.6	2.3	0.0	0.0
127.5°	2.3	4.1	2.3	0.0	0.0
130°	2.3	2.3	2.3	0.0	0.0
132.5°	0.5	0.5	0.5	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)