

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: P645204

Luminaire Tested: OMN4DP-SR4F0-100D830-FLL-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645204
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-SR4F0-100D830-FLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

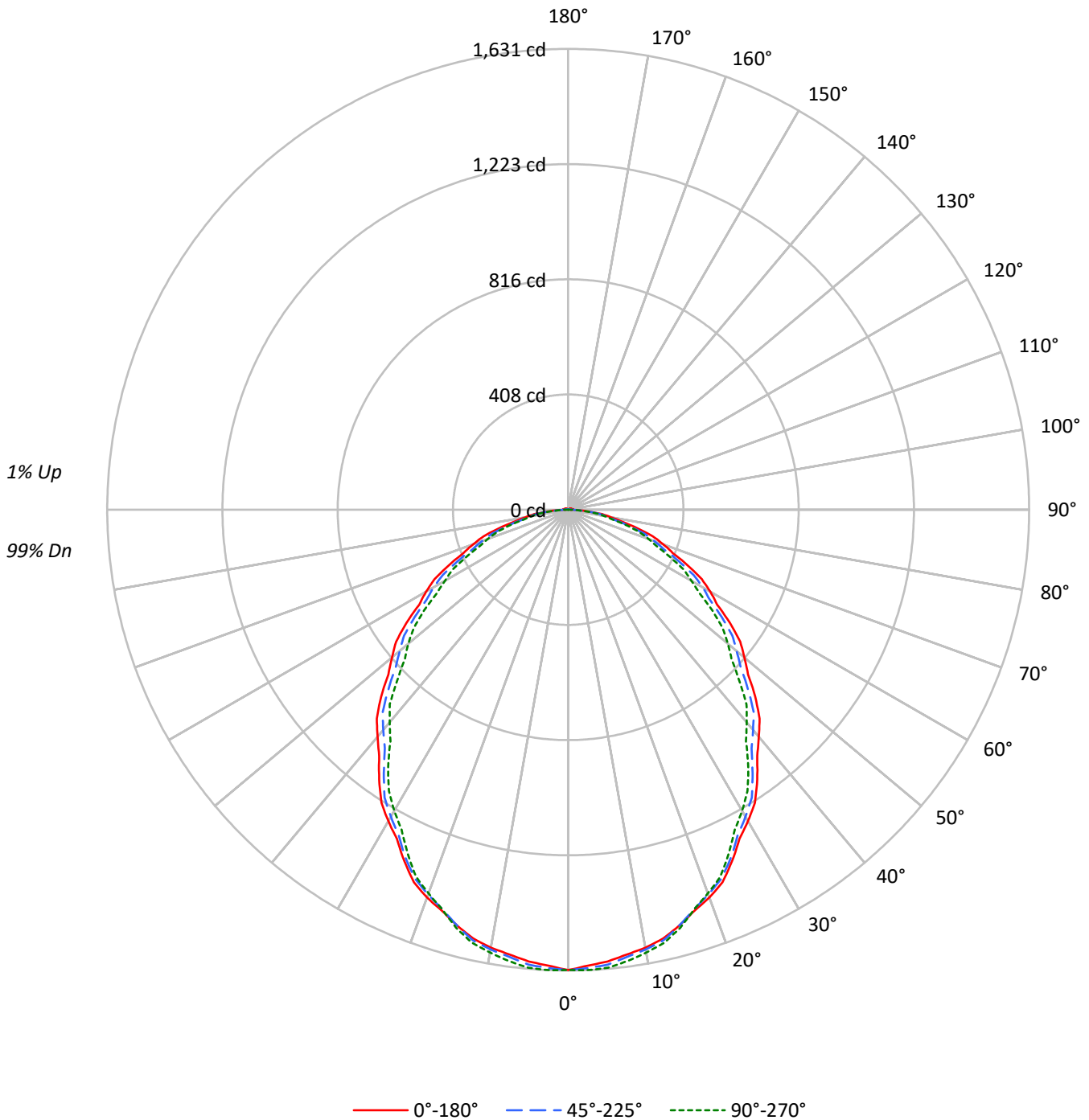
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3973.9 lumens
Efficiency: N/A
Efficacy: 132.9 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): 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										
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°	26305	26305	26305
5°	26010	26190	26370
10°	25802	25911	26093
15°	25454	25454	25603
20°	25098	24909	24831
25°	24444	24246	23931
30°	23720	23390	22935
35°	22980	22413	21888
40°	22099	21444	20698
45°	21359	20548	19536
50°	20434	19542	18540
55°	19654	18657	17534
60°	18755	17751	16249
65°	17784	16512	15244
70°	16848	15276	14233
75°	15764	13967	13275
80°	14431	12775	12162
85°	13542	11912	11078

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21359 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.3	3.9
10°-20°	430.1	10.8
20°-30°	625.3	15.7
30°-40°	711.3	17.9
40°-50°	693.5	17.5
50°-60°	592.0	14.9
60°-70°	430.2	10.8
70°-80°	243.3	6.1
80°-90°	74.9	1.9
90°-100°	9.4	0.2
100°-110°	5.3	0.1
110°-120°	3.2	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°	1208.7	30.4
0°-40°	1920.0	48.3
0°-60°	3205.5	80.7
0°-90°	3954.0	99.5
90°-120°	17.9	0.5
90°-150°	20.0	0.5
90°-180°	20.0	0.5
0°-180°	3973.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1629	1629	1629	1629	1629	
5°	1605	1629	1616	1614	1627	152
15°	1523	1542	1523	1521	1532	429
25°	1372	1385	1361	1337	1343	631
35°	1166	1170	1137	1110	1110	728
45°	935	931	900	869	856	720
55°	698	696	663	632	623	623
65°	466	461	432	406	399	462
75°	253	244	224	215	213	268
85°	73	64	64	62	60	78
90°	9	11	13	11	11	9
95°	18	9	7	7	4	13
105°	11	7	4	2	0	13
115°	7	4	2	0	0	7
125°	4	4	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°	1629.2	1629.2	1629.2	1629.2	1629.2
2.5°	1615.0	1635.8	1623.9	1624.0	1631.0
5°	1604.8	1628.7	1615.9	1614.0	1627.0
7.5°	1588.0	1611.4	1596.4	1594.1	1611.0
10°	1573.8	1595.5	1580.4	1576.4	1591.5
12.5°	1554.3	1576.0	1560.9	1555.1	1570.2
15°	1522.8	1542.3	1522.8	1520.8	1531.7
17.5°	1487.3	1504.2	1481.6	1474.2	1482.5
20°	1460.7	1475.9	1449.7	1438.7	1445.2
22.5°	1427.1	1442.2	1414.2	1398.0	1406.2
25°	1372.1	1385.1	1361.0	1336.8	1343.3
27.5°	1313.1	1323.1	1298.9	1274.2	1276.3
30°	1272.3	1278.8	1254.6	1228.1	1230.2
32.5°	1229.8	1234.5	1208.5	1180.1	1180.6
35°	1165.9	1170.3	1137.1	1110.5	1110.5
37.5°	1098.1	1100.7	1065.3	1036.4	1033.4
40°	1048.5	1052.8	1017.4	988.5	982.0
42.5°	1002.4	1003.2	971.3	942.3	934.1
45°	935.4	931.1	899.9	868.6	855.6
47.5°	863.1	863.1	827.7	796.4	784.2
50°	813.5	813.5	778.0	746.8	738.1
52.5°	767.4	765.7	731.9	700.6	688.5
55°	698.2	696.1	662.8	631.5	622.9
57.5°	625.1	625.1	594.1	560.6	551.0
60°	580.8	580.8	549.7	516.2	503.2
62.5°	532.9	531.1	500.1	470.2	462.4
65°	465.5	461.2	432.2	405.5	399.0
67.5°	401.2	396.9	366.2	344.8	340.5
70°	356.9	352.5	323.6	305.8	301.5
72.5°	314.3	308.2	282.8	268.6	264.2
75°	252.7	244.0	223.9	215.0	212.8
77.5°	194.2	179.4	171.1	164.9	162.7
80°	155.2	142.2	137.4	132.9	130.8
82.5°	121.5	108.5	107.3	104.6	102.4
85°	73.1	64.5	64.3	62.0	59.8
87.5°	31.9	27.2	27.5	27.0	27.0
90°	8.9	11.0	13.3	11.1	11.1
92.5°	16.0	11.2	9.8	9.3	7.5
95°	17.7	9.1	6.6	6.6	4.4
97.5°	15.5	9.0	6.2	4.0	2.2
100°	15.5	9.0	4.4	2.2	2.2
102.5°	13.7	7.2	4.4	2.2	0.4
105°	11.1	6.7	4.4	2.2	0.0
107.5°	10.6	6.7	4.4	2.2	0.0
110°	8.9	6.7	4.4	2.2	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.9	6.7	4.4	2.2	0.0
115°	6.6	4.5	2.2	0.0	0.0
117.5°	6.6	4.5	2.2	0.0	0.0
120°	6.6	4.5	2.2	0.0	0.0
122.5°	4.9	4.4	2.2	0.0	0.0
125°	4.4	4.4	2.2	0.0	0.0
127.5°	2.2	4.0	2.2	0.0	0.0
130°	2.2	2.2	2.2	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)