

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: P645236

Luminaire Tested: OMN4DP-SR4F0-125D940-CLB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645236
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-SR4F0-125D940-CLB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

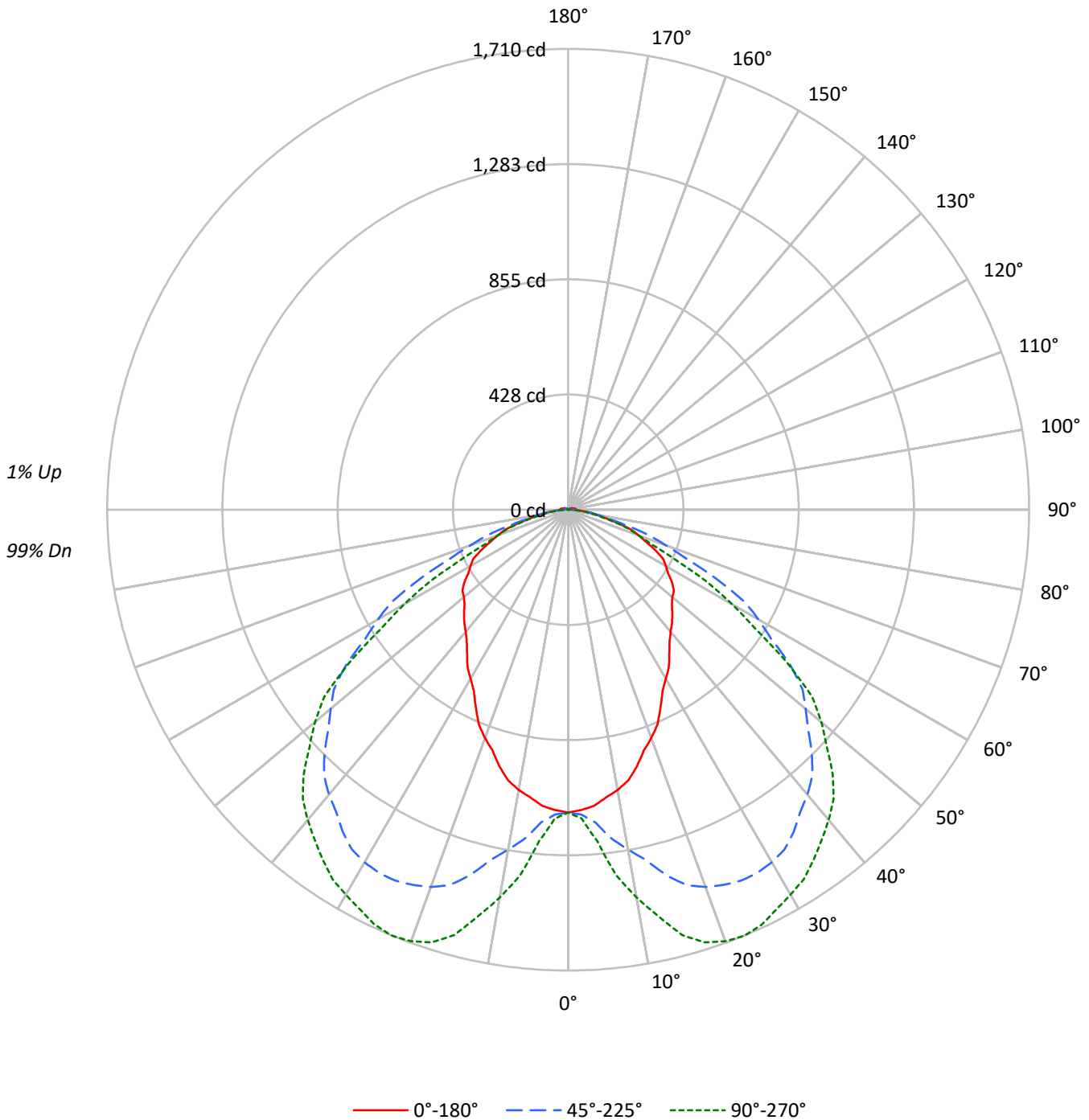
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4346.8 lumens
Efficiency: N/A
Efficacy: 108.7 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): 40
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	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°	18146	18146	18146
5°	17877	18893	19995
10°	17311	20997	23953
15°	16471	23460	27305
20°	15493	25598	29280
25°	14434	27052	30266
30°	13498	28165	30747
35°	12879	28746	31271
40°	12450	29086	31676
45°	12474	29184	31691
50°	12670	28886	30790
55°	13244	28327	27958
60°	13504	26334	22704
65°	13681	23068	16676
70°	13076	18137	12954
75°	11740	13531	10923
80°	9967	10693	8749
85°	9689	8707	7262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 31691 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	2.7
10°-20°	383.0	8.8
20°-30°	636.4	14.6
30°-40°	802.8	18.5
40°-50°	858.2	19.7
50°-60°	757.4	17.4
60°-70°	486.1	11.2
70°-80°	215.6	5.0
80°-90°	55.9	1.3
90°-100°	14.7	0.3
100°-110°	9.4	0.2
110°-120°	7.1	0.2
120°-130°	4.6	0.1
130°-140°	0.5	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°	1134.7	26.1
0°-40°	1937.4	44.6
0°-60°	3553.0	81.7
0°-90°	4310.6	99.2
90°-120°	31.2	0.7
90°-150°	36.2	0.8
90°-180°	36.0	0.8
0°-180°	4346.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1124	1124	1124	1124	1124	
5°	1103	1136	1166	1206	1234	104
15°	985	1136	1404	1572	1634	276
25°	810	1099	1518	1661	1699	373
35°	653	1004	1458	1553	1586	410
45°	546	858	1278	1357	1388	422
55°	470	675	1006	1011	993	417
65°	358	453	604	490	436	350
75°	188	209	217	185	175	201
85°	52	45	47	42	39	55
90°	18	18	16	16	10	13
95°	29	18	13	8	5	21
105°	18	16	8	3	0	20
115°	13	10	8	3	0	14
125°	8	8	8	3	0	7
135°	0	0	0	0	0	1
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°	1123.9	1123.9	1123.9	1123.9	1123.9
2.5°	1115.5	1131.9	1132.2	1138.7	1146.9
5°	1103.0	1136.2	1165.7	1205.5	1233.7
7.5°	1076.8	1136.1	1230.5	1323.0	1369.0
10°	1055.9	1137.7	1280.7	1404.8	1461.0
12.5°	1028.7	1137.1	1330.9	1480.3	1544.7
15°	985.4	1136.1	1403.5	1572.2	1633.5
17.5°	935.2	1131.4	1460.5	1629.5	1683.2
20°	901.7	1126.6	1489.8	1650.4	1704.1
22.5°	864.1	1115.5	1506.5	1660.8	1710.4
25°	810.2	1099.0	1518.5	1660.6	1698.9
27.5°	757.4	1075.4	1519.1	1639.5	1672.2
30°	724.0	1056.2	1510.7	1618.6	1649.2
32.5°	694.7	1035.1	1494.0	1593.5	1626.2
35°	653.4	1003.5	1458.4	1553.3	1586.5
37.5°	617.9	967.5	1413.5	1505.8	1544.7
40°	590.7	938.3	1380.0	1472.2	1502.9
42.5°	569.8	907.1	1340.3	1430.3	1456.9
45°	546.3	858.0	1278.1	1357.2	1387.9
47.5°	521.2	807.4	1206.5	1281.2	1301.1
50°	504.4	770.2	1150.0	1218.1	1225.8
52.5°	494.0	731.1	1095.7	1138.6	1140.1
55°	470.5	674.9	1006.3	1011.1	993.2
57.5°	439.1	609.3	892.8	867.3	824.4
60°	418.2	563.9	815.5	764.4	703.1
62.5°	397.3	520.5	733.9	651.3	579.7
65°	358.1	452.6	603.8	490.2	436.5
67.5°	312.6	378.0	474.1	366.7	330.9
70°	277.0	328.2	384.2	300.0	274.4
72.5°	243.6	278.4	311.0	248.0	234.7
75°	188.2	208.6	216.9	185.3	175.1
77.5°	138.5	139.5	150.5	130.6	125.5
80°	107.2	102.0	115.0	99.2	94.1
82.5°	82.1	74.9	83.6	72.1	69.0
85°	52.3	44.6	47.0	41.8	39.2
87.5°	30.8	24.7	24.0	21.9	18.8
90°	18.3	18.3	15.7	15.6	10.5
92.5°	24.6	18.4	13.6	11.4	6.3
95°	28.8	18.5	13.1	7.8	5.2
97.5°	25.6	17.9	9.9	5.2	2.6
100°	23.5	15.9	7.8	5.2	2.6
102.5°	21.4	15.8	7.8	3.1	0.5
105°	18.3	15.7	7.8	2.6	0.0
107.5°	17.8	13.2	7.8	2.6	0.0
110°	15.7	13.1	7.8	2.6	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	15.7	13.1	7.8	2.6	0.0
115°	13.1	10.5	7.8	2.6	0.0
117.5°	12.5	10.5	7.8	2.6	0.0
120°	10.5	10.5	7.8	2.6	0.0
122.5°	10.5	8.4	5.8	2.6	0.0
125°	7.8	7.8	7.8	2.6	0.0
127.5°	5.2	7.3	5.2	2.0	0.0
130°	5.2	5.2	5.2	0.0	0.0
132.5°	1.0	1.0	1.0	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)