

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: P645257

Luminaire Tested: OMN4DP-SR4F0-75D830-CLB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645257
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-SR4F0-75D830-CLB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

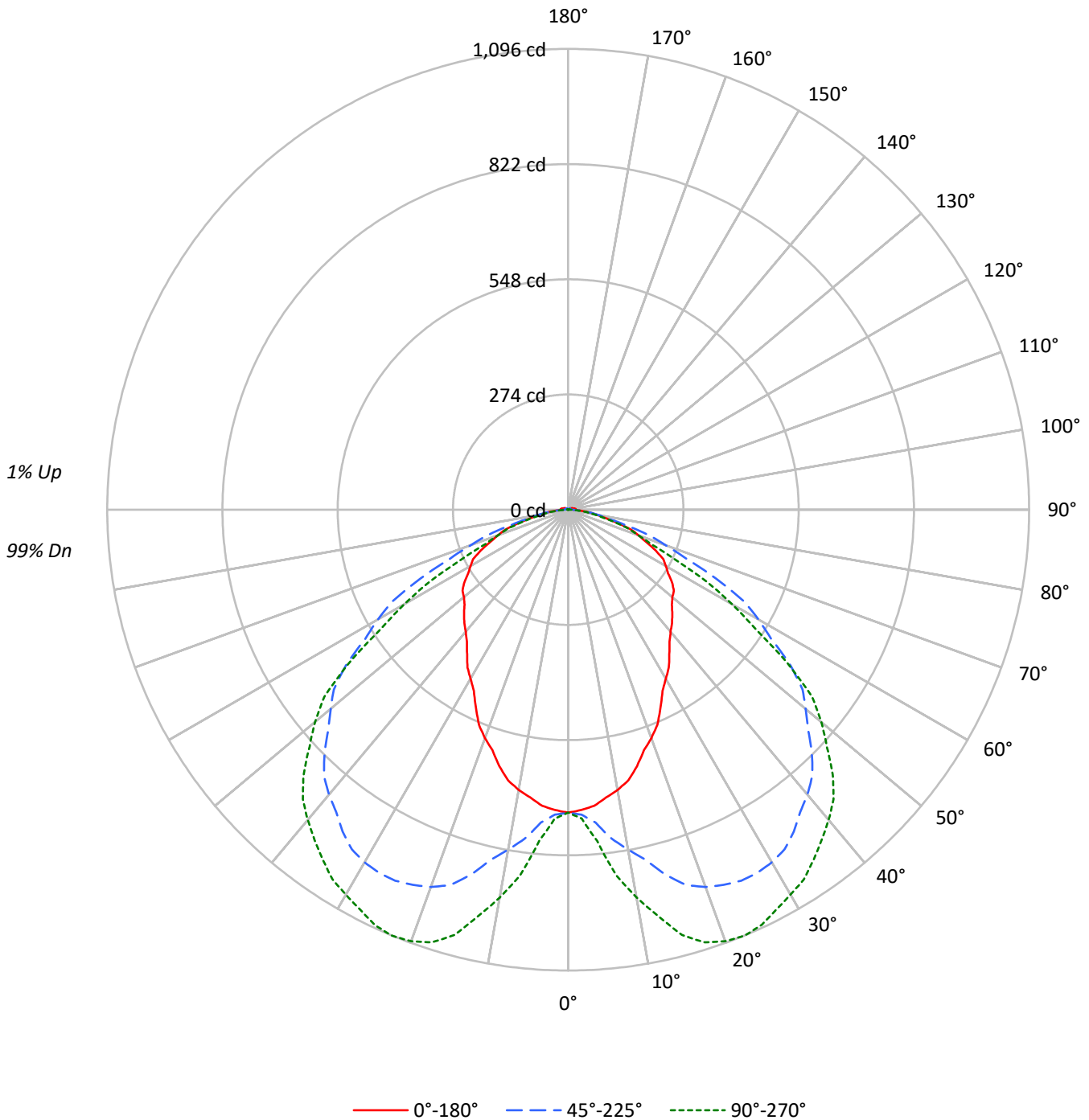
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2786.2 lumens
Efficiency: N/A
Efficacy: 127.8 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): 21.8
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	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	51				
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°	11631	11631	11631
5°	11459	12110	12817
10°	11096	13459	15354
15°	10557	15039	17503
20°	9931	16407	18768
25°	9253	17341	19400
30°	8652	18053	19708
35°	8255	18425	20044
40°	7980	18645	20303
45°	7994	18705	20313
50°	8121	18515	19736
55°	8490	18156	17920
60°	8657	16879	14554
65°	8768	14785	10690
70°	8384	11627	8304
75°	7523	8677	6999
80°	6388	6853	5607
85°	6206	5595	4650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 20313 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	2.7
10°-20°	245.5	8.8
20°-30°	407.9	14.6
30°-40°	514.6	18.5
40°-50°	550.1	19.7
50°-60°	485.5	17.4
60°-70°	311.6	11.2
70°-80°	138.2	5.0
80°-90°	35.8	1.3
90°-100°	9.4	0.3
100°-110°	6.0	0.2
110°-120°	4.5	0.2
120°-130°	2.9	0.1
130°-140°	0.3	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°	727.3	26.1
0°-40°	1241.9	44.6
0°-60°	2277.4	81.7
0°-90°	2763.0	99.2
90°-120°	20.0	0.7
90°-150°	23.2	0.8
90°-180°	23.0	0.8
0°-180°	2786.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	707	728	747	773	791	66
15°	632	728	900	1008	1047	177
25°	519	704	973	1064	1089	239
35°	419	643	935	996	1017	263
45°	350	550	819	870	890	271
55°	302	433	645	648	637	268
65°	230	290	387	314	280	225
75°	121	134	139	119	112	129
85°	34	29	30	27	25	35
90°	12	12	10	10	7	8
95°	18	12	8	5	3	14
105°	12	10	5	2	0	13
115°	8	7	5	2	0	9
125°	5	5	5	2	0	5
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°	720.4	720.4	720.4	720.4	720.4
2.5°	715.0	725.5	725.8	729.9	735.1
5°	707.0	728.3	747.2	772.7	790.8
7.5°	690.2	728.2	788.7	848.1	877.5
10°	676.8	729.3	820.9	900.5	936.5
12.5°	659.4	728.9	853.1	948.8	990.1
15°	631.6	728.2	899.7	1007.8	1047.1
17.5°	599.4	725.2	936.2	1044.5	1078.9
20°	578.0	722.1	954.9	1057.9	1092.3
22.5°	553.9	715.1	965.7	1064.6	1096.3
25°	519.4	704.5	973.4	1064.4	1089.0
27.5°	485.5	689.3	973.7	1050.9	1071.9
30°	464.1	677.0	968.3	1037.5	1057.1
32.5°	445.3	663.5	957.6	1021.4	1042.4
35°	418.8	643.3	934.8	995.6	1016.9
37.5°	396.0	620.1	906.0	965.2	990.1
40°	378.6	601.4	884.6	943.7	963.3
42.5°	365.2	581.5	859.1	916.8	933.8
45°	350.1	550.0	819.2	869.9	889.6
47.5°	334.1	517.5	773.3	821.2	834.0
50°	323.3	493.7	737.1	780.8	785.7
52.5°	316.6	468.7	702.3	729.8	730.8
55°	301.6	432.6	645.0	648.1	636.6
57.5°	281.5	390.6	572.3	555.9	528.4
60°	268.1	361.4	522.7	490.0	450.7
62.5°	254.7	333.6	470.4	417.5	371.6
65°	229.5	290.1	387.0	314.2	279.8
67.5°	200.4	242.3	303.9	235.0	212.1
70°	177.6	210.3	246.3	192.3	175.9
72.5°	156.1	178.4	199.4	159.0	150.4
75°	120.6	133.7	139.1	118.8	112.2
77.5°	88.8	89.4	96.5	83.7	80.4
80°	68.7	65.4	73.7	63.6	60.3
82.5°	52.6	48.0	53.6	46.2	44.2
85°	33.5	28.6	30.2	26.8	25.1
87.5°	19.8	15.8	15.4	14.0	12.1
90°	11.7	11.7	10.1	10.0	6.7
92.5°	15.7	11.8	8.7	7.3	4.0
95°	18.4	11.9	8.4	5.0	3.4
97.5°	16.4	11.5	6.4	3.3	1.7
100°	15.1	10.2	5.0	3.3	1.7
102.5°	13.7	10.1	5.0	2.0	0.3
105°	11.7	10.1	5.0	1.6	0.0
107.5°	11.4	8.4	5.0	1.6	0.0
110°	10.1	8.4	5.0	1.6	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.1	8.4	5.0	1.6	0.0
115°	8.4	6.7	5.0	1.6	0.0
117.5°	8.0	6.7	5.0	1.6	0.0
120°	6.7	6.7	5.0	1.6	0.0
122.5°	6.7	5.4	3.7	1.6	0.0
125°	5.0	5.0	5.0	1.6	0.0
127.5°	3.4	4.7	3.4	1.3	0.0
130°	3.4	3.4	3.4	0.0	0.0
132.5°	0.7	0.7	0.7	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)