

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: P645268

Luminaire Tested: OMN4DP-SR4F0-75D935-CLB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645268  
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-SR4F0-75D935-CLB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

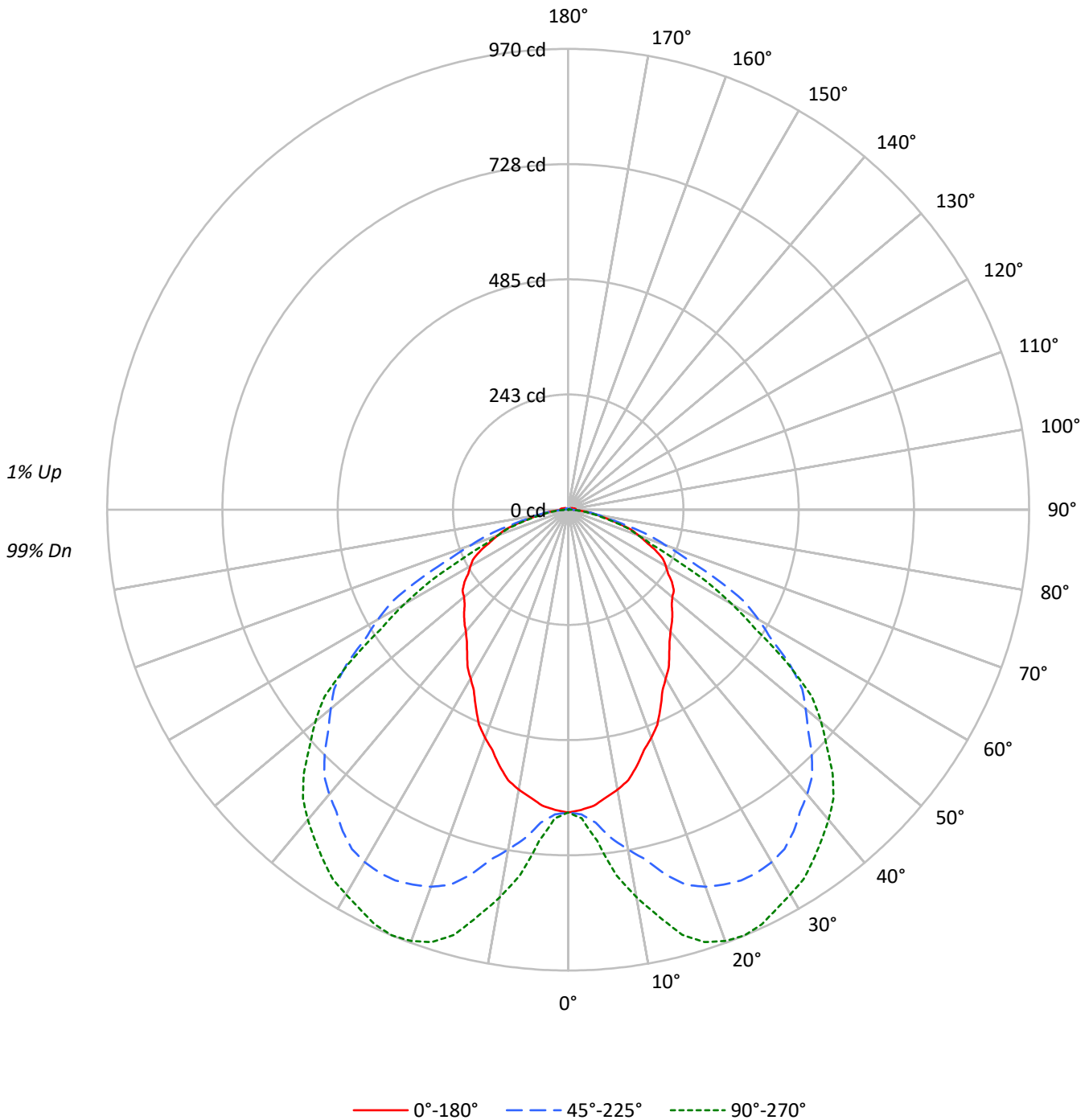
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2464.3 lumens  
Efficiency: N/A  
Efficacy: 113.0 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	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°	10288	10288	10288
5°	10135	10712	11336
10°	9814	11904	13580
15°	9337	13300	15480
20°	8783	14512	16600
25°	8182	15337	17158
30°	7651	15968	17432
35°	7301	16297	17728
40°	7059	16491	17958
45°	7072	16545	17966
50°	7184	16377	17455
55°	7507	16059	15851
60°	7656	14928	12871
65°	7755	13077	9456
70°	7416	10282	7345
75°	6656	7673	6195
80°	5653	6062	4956
85°	5483	4946	4113

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 17966 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.3	2.7
10°-20°	217.2	8.8
20°-30°	360.8	14.6
30°-40°	455.1	18.5
40°-50°	486.5	19.7
50°-60°	429.4	17.4
60°-70°	275.6	11.2
70°-80°	122.2	5.0
80°-90°	31.7	1.3
90°-100°	8.3	0.3
100°-110°	5.3	0.2
110°-120°	4.0	0.2
120°-130°	2.6	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°	643.3	26.1
0°-40°	1098.4	44.6
0°-60°	2014.3	81.7
0°-90°	2443.8	99.2
90°-120°	17.7	0.7
90°-150°	20.5	0.8
90°-180°	21.0	0.9
0°-180°	2464.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	625	644	661	683	699	59
15°	559	644	796	891	926	156
25°	459	623	861	941	963	211
35°	370	569	827	881	899	233
45°	310	486	725	769	787	239
55°	267	383	570	573	563	237
65°	203	257	342	278	248	199
75°	107	118	123	105	99	114
85°	30	25	27	24	22	31
90°	10	10	9	9	6	7
95°	16	10	7	4	3	12
105°	10	9	4	1	0	12
115°	7	6	4	1	0	8
125°	4	4	4	1	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°	637.2	637.2	637.2	637.2	637.2
2.5°	632.4	641.7	641.9	645.6	650.2
5°	625.3	644.1	660.9	683.4	699.4
7.5°	610.5	644.1	697.6	750.1	776.1
10°	598.6	645.0	726.1	796.4	828.3
12.5°	583.2	644.6	754.5	839.2	875.7
15°	558.6	644.1	795.7	891.3	926.1
17.5°	530.2	641.4	828.0	923.8	954.2
20°	511.2	638.7	844.6	935.7	966.1
22.5°	489.9	632.4	854.1	941.5	969.7
25°	459.3	623.1	860.9	941.4	963.1
27.5°	429.4	609.6	861.2	929.5	948.0
30°	410.4	598.8	856.5	917.6	935.0
32.5°	393.8	586.8	847.0	903.4	921.9
35°	370.4	568.9	826.8	880.6	899.4
37.5°	350.3	548.5	801.3	853.7	875.7
40°	334.9	531.9	782.4	834.6	852.0
42.5°	323.0	514.3	759.8	810.9	825.9
45°	309.7	486.4	724.6	769.4	786.8
47.5°	295.5	457.7	684.0	726.3	737.6
50°	286.0	436.7	652.0	690.6	694.9
52.5°	280.1	414.5	621.1	645.5	646.3
55°	266.7	382.6	570.5	573.2	563.1
57.5°	248.9	345.4	506.2	491.7	467.3
60°	237.1	319.7	462.3	433.4	398.6
62.5°	225.2	295.1	416.1	369.2	328.7
65°	203.0	256.6	342.3	277.9	247.5
67.5°	177.2	214.3	268.8	207.9	187.6
70°	157.1	186.0	217.8	170.1	155.6
72.5°	138.1	157.8	176.3	140.6	133.1
75°	106.7	118.3	123.0	105.1	99.3
77.5°	78.5	79.1	85.3	74.0	71.1
80°	60.8	57.9	65.2	56.2	53.3
82.5°	46.5	42.5	47.4	40.9	39.1
85°	29.6	25.3	26.7	23.7	22.2
87.5°	17.5	14.0	13.6	12.4	10.7
90°	10.4	10.4	8.9	8.8	5.9
92.5°	13.9	10.5	7.7	6.5	3.6
95°	16.3	10.5	7.4	4.4	3.0
97.5°	14.5	10.2	5.6	2.9	1.5
100°	13.3	9.0	4.4	2.9	1.5
102.5°	12.2	9.0	4.4	1.7	0.3
105°	10.4	8.9	4.4	1.4	0.0
107.5°	10.1	7.5	4.4	1.4	0.0
110°	8.9	7.4	4.4	1.4	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	8.9	7.4	4.4	1.4	0.0
115°	7.4	6.0	4.4	1.4	0.0
117.5°	7.1	6.0	4.4	1.4	0.0
120°	5.9	5.9	4.4	1.4	0.0
122.5°	5.9	4.8	3.3	1.4	0.0
125°	4.4	4.4	4.4	1.4	0.0
127.5°	3.0	4.1	3.0	1.2	0.0
130°	3.0	3.0	3.0	0.0	0.0
132.5°	0.6	0.6	0.6	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)