

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: P645264

Luminaire Tested: OMN4DP-SR4F0-75D930-CLB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645264  
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-SR4F0-75D930-CLB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

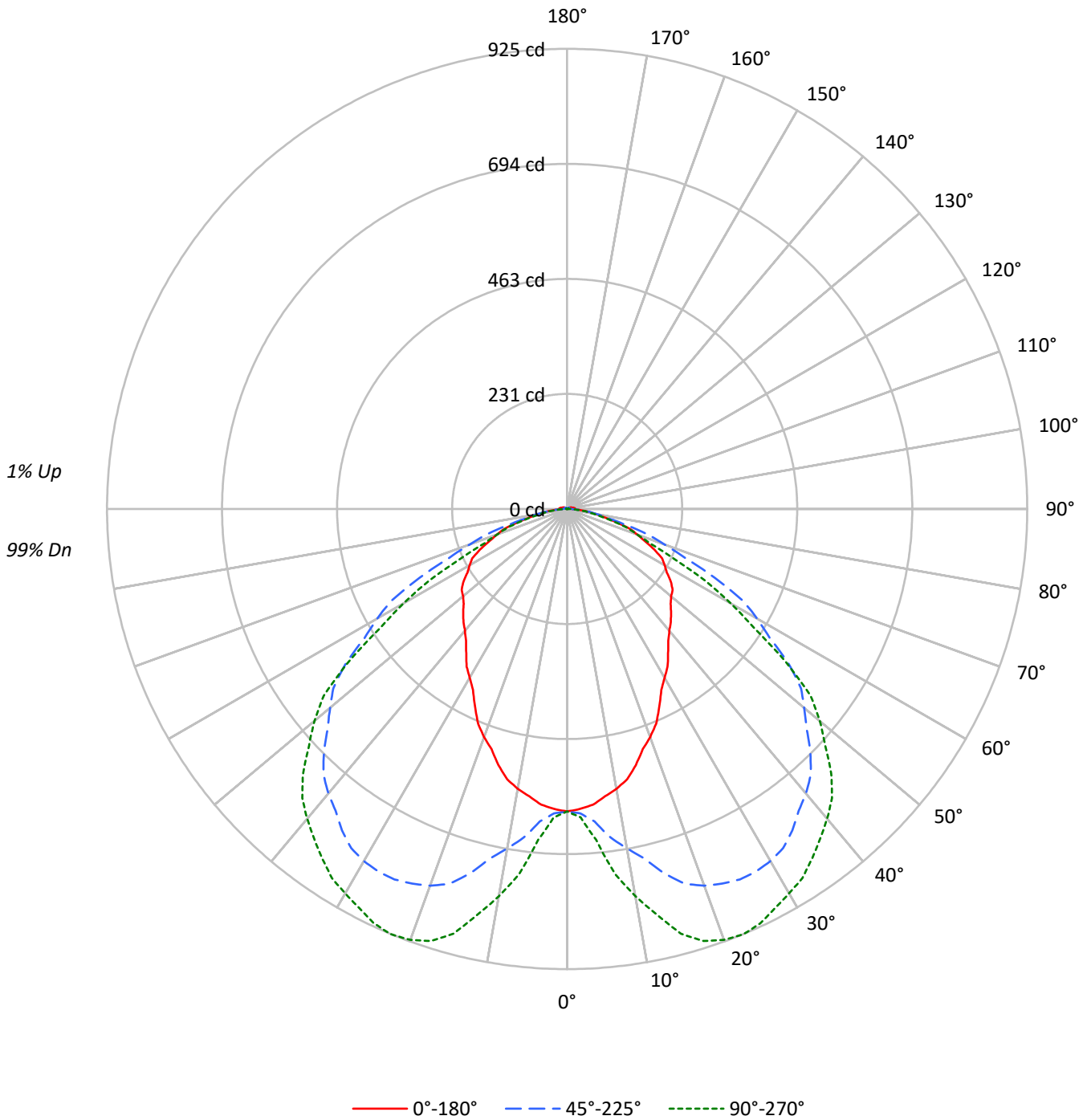
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2351.5 lumens  
Efficiency: N/A  
Efficacy: 107.9 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										
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°	9817	9817	9817
5°	9671	10220	10817
10°	9365	11358	12959
15°	8909	12692	14771
20°	8381	13847	15840
25°	7808	14635	16372
30°	7301	15236	16634
35°	6968	15552	16915
40°	6734	15734	17136
45°	6747	15787	17144
50°	6855	15626	16656
55°	7164	15325	15125
60°	7304	14244	12281
65°	7400	12478	9020
70°	7076	9810	7010
75°	6351	7324	5908
80°	5393	5783	4733
85°	5243	4724	3927

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 17144 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.4	2.7
10°-20°	207.2	8.8
20°-30°	344.2	14.6
30°-40°	434.3	18.5
40°-50°	464.2	19.7
50°-60°	409.7	17.4
60°-70°	263.0	11.2
70°-80°	116.6	5.0
80°-90°	30.2	1.3
90°-100°	8.0	0.3
100°-110°	5.1	0.2
110°-120°	3.9	0.2
120°-130°	2.5	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°	613.8	26.1
0°-40°	1048.1	44.6
0°-60°	1922.1	81.7
0°-90°	2331.9	99.2
90°-120°	16.9	0.7
90°-150°	19.6	0.8
90°-180°	20.0	0.9
0°-180°	2351.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	597	615	631	652	667	56
15°	533	615	759	850	884	149
25°	438	594	822	898	919	202
35°	354	543	789	840	858	222
45°	296	464	691	734	751	228
55°	254	365	544	547	537	226
65°	194	245	327	265	236	190
75°	102	113	117	100	95	109
85°	28	24	26	23	21	30
90°	10	10	8	8	6	7
95°	16	10	7	4	3	12
105°	10	8	4	1	0	11
115°	7	6	4	1	0	7
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°	608.0	608.0	608.0	608.0	608.0
2.5°	603.5	612.3	612.5	616.0	620.4
5°	596.7	614.6	630.6	652.2	667.4
7.5°	582.5	614.6	665.7	715.7	740.6
10°	571.2	615.5	692.8	760.0	790.4
12.5°	556.5	615.1	720.0	800.8	835.6
15°	533.0	614.6	759.3	850.5	883.7
17.5°	505.9	612.1	790.1	881.5	910.5
20°	487.8	609.5	805.9	892.8	921.9
22.5°	467.4	603.5	815.0	898.4	925.3
25°	438.3	594.5	821.5	898.3	919.0
27.5°	409.7	581.7	821.8	886.9	904.6
30°	391.6	571.4	817.2	875.6	892.2
32.5°	375.8	560.0	808.2	862.0	879.7
35°	353.5	542.9	789.0	840.3	858.2
37.5°	334.2	523.4	764.6	814.6	835.6
40°	319.5	507.6	746.5	796.4	813.0
42.5°	308.2	490.7	725.0	773.7	788.1
45°	295.5	464.2	691.4	734.2	750.8
47.5°	281.9	436.8	652.7	693.1	703.8
50°	272.9	416.7	622.1	659.0	663.1
52.5°	267.2	395.5	592.7	615.9	616.7
55°	254.5	365.1	544.4	547.0	537.3
57.5°	237.5	329.6	483.0	469.2	445.9
60°	226.2	305.0	441.1	413.5	380.3
62.5°	214.9	281.5	397.0	352.3	313.6
65°	193.7	244.9	326.6	265.2	236.1
67.5°	169.1	204.5	256.5	198.4	179.0
70°	149.9	177.5	207.8	162.3	148.5
72.5°	131.8	150.6	168.3	134.2	127.0
75°	101.8	112.9	117.4	100.3	94.7
77.5°	74.9	75.5	81.4	70.6	67.9
80°	58.0	55.2	62.2	53.7	50.9
82.5°	44.4	40.5	45.2	39.0	37.3
85°	28.3	24.1	25.5	22.6	21.2
87.5°	16.7	13.4	13.0	11.8	10.2
90°	9.9	9.9	8.5	8.4	5.7
92.5°	13.3	10.0	7.4	6.2	3.4
95°	15.6	10.0	7.1	4.2	2.8
97.5°	13.9	9.7	5.4	2.8	1.4
100°	12.7	8.6	4.2	2.8	1.4
102.5°	11.6	8.6	4.2	1.7	0.3
105°	9.9	8.5	4.2	1.4	0.0
107.5°	9.6	7.1	4.2	1.4	0.0
110°	8.5	7.1	4.2	1.4	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	8.5	7.1	4.2	1.4	0.0
115°	7.1	5.7	4.2	1.4	0.0
117.5°	6.8	5.7	4.2	1.4	0.0
120°	5.7	5.7	4.2	1.4	0.0
122.5°	5.7	4.5	3.1	1.4	0.0
125°	4.2	4.2	4.2	1.4	0.0
127.5°	2.8	3.9	2.8	1.1	0.0
130°	2.8	2.8	2.8	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)