

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: P645045

Luminaire Tested: OMN4DIP-SR4F0-75D100U935-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645045
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-75D100U935-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

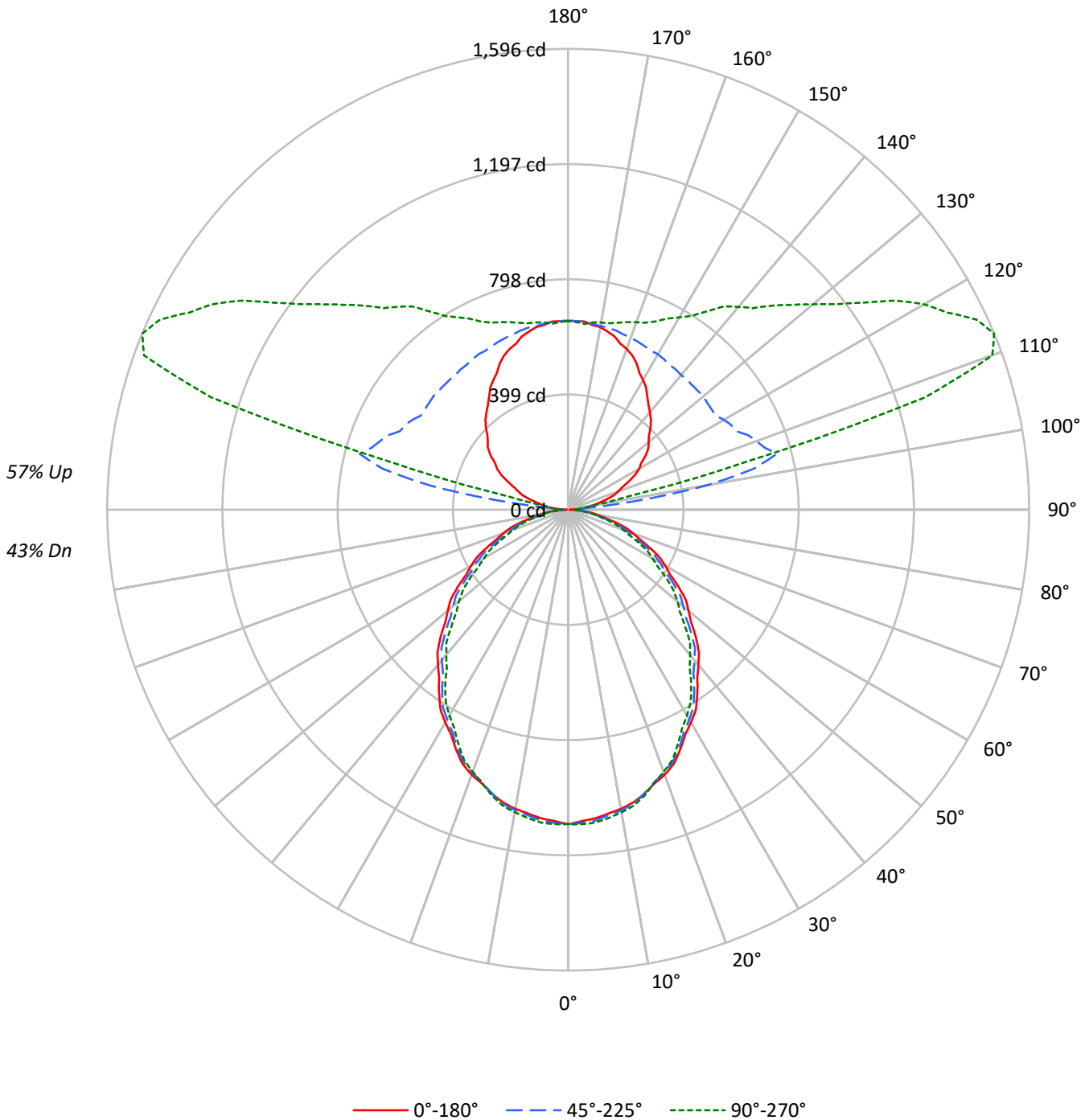
Lumens per Lamp: N/A
Luminaire Lumens: 6170.5 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.8
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43																				
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36																				
2	88	80	74	69	80	74	68	64	61	57	54	49	47	45	39	37	35	30																				
3	80	71	64	58	73	65	59	54	54	49	46	44	41	38	34	32	30	26																				
4	73	63	55	49	67	58	51	46	48	43	39	39	35	32	31	28	26	22																				
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23	19																				
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	25	22	20	17																				
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15																				
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	14																				
9	49	37	30	25	45	35	28	24	29	24	20	24	20	18	20	17	15	12																				
10	46	34	27	22	42	32	25	21	27	22	18	22	19	16	18	15	13	11																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17584	17584	17584
5°	17387	17507	17627
10°	17247	17321	17443
15°	17016	17016	17115
20°	16778	16651	16600
25°	16340	16208	15996
30°	15856	15636	15333
35°	15362	14982	14633
40°	14773	14334	13835
45°	14278	13737	13061
50°	13659	13064	12393
55°	13140	12470	11721
60°	12536	11867	10863
65°	11889	11037	10189
70°	11264	10211	9512
75°	10536	9339	8871
80°	9642	8545	8126
85°	9059	7966	7410

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14278 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	1.7
10°-20°	287.5	4.7
20°-30°	418.0	6.8
30°-40°	475.5	7.7
40°-50°	463.6	7.5
50°-60°	395.7	6.4
60°-70°	287.6	4.7
70°-80°	162.6	2.6
80°-90°	51.5	0.8
90°-100°	86.7	1.4
100°-110°	576.4	9.3
110°-120°	779.9	12.6
120°-130°	634.3	10.3
130°-140°	509.3	8.3
140°-150°	401.4	6.5
150°-160°	293.5	4.8
160°-170°	182.3	3.0
170°-180°	62.2	1.0
0°-30°	808.0	13.1
0°-40°	1283.5	20.8
0°-60°	2142.8	34.7
0°-90°	2644.6	42.9
90°-120°	1443.1	23.4
90°-150°	2988.0	48.4
90°-180°	3526.0	57.1
0°-180°	6170.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1073	1089	1080	1079	1088	102
15°	1018	1031	1018	1017	1024	287
25°	917	926	910	894	898	422
35°	779	782	760	742	742	487
45°	625	622	602	581	572	481
55°	467	465	443	422	416	417
65°	311	308	289	271	267	309
75°	169	163	150	144	142	179
85°	49	43	43	42	40	52
90°	6	11	17	20	20	7
95°	45	67	37	42	48	46
105°	135	200	747	952	629	143
115°	231	277	643	1334	1559	230
125°	328	372	606	1057	1250	291
135°	403	447	609	871	999	310
145°	477	517	613	758	839	300
155°	559	579	625	688	720	257
165°	621	629	642	658	670	174
175°	654	658	654	650	646	62
180°	654	654	654	654	654	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1089.1	1089.1	1089.1	1089.1	1089.1
2.5°	1079.6	1093.5	1085.5	1085.6	1090.3
5°	1072.8	1088.7	1080.2	1078.9	1087.6
7.5°	1061.5	1077.2	1067.2	1065.6	1076.9
10°	1052.0	1066.5	1056.5	1053.8	1063.9
12.5°	1039.0	1053.5	1043.5	1039.5	1049.7
15°	1018.0	1031.0	1018.0	1016.6	1023.9
17.5°	994.3	1005.6	990.4	985.5	991.0
20°	976.5	986.6	969.1	961.8	966.1
22.5°	954.0	964.1	945.4	934.5	940.0
25°	917.2	925.9	909.8	893.6	897.9
27.5°	877.8	884.5	868.3	851.7	853.2
30°	850.5	854.9	838.7	820.9	822.4
32.5°	822.1	825.3	807.9	788.9	789.2
35°	779.4	782.3	760.1	742.4	742.4
37.5°	734.1	735.8	712.1	692.8	690.8
40°	700.9	703.8	680.1	660.8	656.4
42.5°	670.0	670.6	649.3	629.9	624.4
45°	625.3	622.4	601.6	580.6	572.0
47.5°	577.0	577.0	553.3	532.4	524.2
50°	543.8	543.8	520.1	499.2	493.4
52.5°	513.0	511.8	489.3	468.3	460.2
55°	466.8	465.3	443.0	422.2	416.4
57.5°	417.9	417.9	397.1	374.7	368.4
60°	388.2	388.2	367.5	345.1	336.4
62.5°	356.2	355.1	334.3	314.3	309.1
65°	311.2	308.3	288.9	271.1	266.7
67.5°	268.2	265.3	244.8	230.5	227.6
70°	238.6	235.7	216.3	204.4	201.5
72.5°	210.1	206.1	189.1	179.5	176.6
75°	168.9	163.1	149.7	143.7	142.2
77.5°	129.8	119.9	114.4	110.2	108.8
80°	103.7	95.0	91.9	88.9	87.4
82.5°	81.2	72.5	71.7	69.9	68.5
85°	48.9	43.1	43.0	41.5	40.0
87.5°	21.3	19.0	20.0	20.5	20.5
90°	5.9	11.4	17.1	19.7	19.7
92.5°	20.5	21.4	24.6	31.8	33.8
95°	44.8	67.1	37.3	41.6	48.2
97.5°	68.8	123.1	246.0	74.0	63.2
100°	88.5	152.5	488.2	144.3	96.1
102.5°	107.1	174.3	659.3	378.4	206.7
105°	134.9	200.4	747.3	952.4	629.2
107.5°	164.2	213.1	713.6	1385.4	1296.3
110°	182.8	229.6	693.9	1455.6	1562.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	202.5	249.3	674.1	1414.6	1595.7
115°	230.6	277.4	643.0	1333.5	1558.7
117.5°	261.1	307.1	635.6	1247.3	1478.9
120°	284.1	326.9	622.5	1181.7	1422.9
122.5°	299.4	346.5	606.0	1125.3	1347.3
125°	327.9	372.1	606.0	1057.2	1250.2
127.5°	350.2	396.4	606.8	978.2	1168.8
130°	363.4	411.6	610.1	925.3	1106.3
132.5°	378.7	426.9	609.0	901.6	1050.3
135°	403.0	447.3	608.7	870.7	999.3
137.5°	423.6	471.0	608.7	836.5	946.7
140°	440.0	484.3	608.7	816.6	917.1
142.5°	456.5	497.5	611.9	793.4	887.5
145°	477.1	517.3	612.8	758.5	839.0
147.5°	501.7	537.1	617.7	733.4	795.4
150°	518.2	550.4	621.0	716.8	769.0
152.5°	534.6	563.6	621.0	703.4	746.0
155°	559.3	579.4	625.1	687.5	719.7
157.5°	579.0	598.3	630.0	677.5	700.8
160°	592.2	608.3	633.3	670.8	690.9
162.5°	602.1	618.2	636.6	667.4	681.0
165°	621.0	629.0	641.6	658.3	670.3
167.5°	631.7	638.9	645.7	654.1	661.3
170°	641.6	645.6	645.7	654.0	658.0
172.5°	644.8	652.1	649.0	650.7	654.7
175°	653.9	657.9	653.9	649.7	645.7
177.5°	653.9	657.1	653.9	653.8	650.6
180°	653.9	653.9	653.9	653.9	653.9

(END OF REPORT)