

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: P645054

Luminaire Tested: OMN4DIP-SR4F0-75D125U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645054
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-75D125U830-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

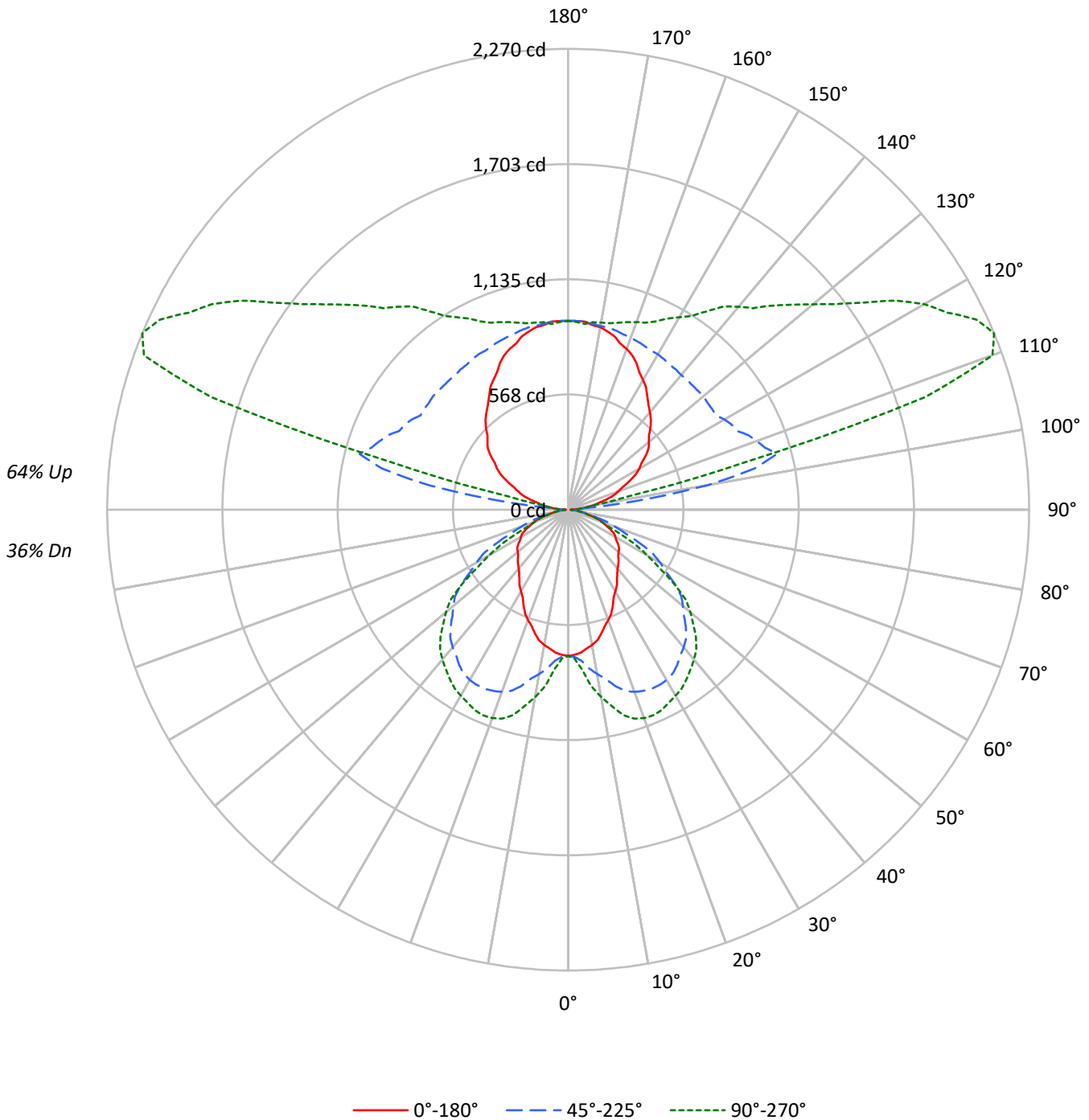
Lumens per Lamp: N/A
Luminaire Lumens: 7785.2 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 60
Input Voltage (V): 120
Input Current (A_{in}): 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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	36				
1	95	90	87	83	85	82	79	76	66	64	62	51	50	49	38	37	36	30				
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	33	32	31	25				
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	29	28	26	21				
4	72	61	53	47	65	56	49	44	45	40	36	35	32	29	26	24	22	18				
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	23	21	19	16				
6	60	48	40	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14				
7	56	44	36	30	50	40	33	28	32	27	23	26	22	19	19	17	15	12				
8	51	39	32	27	46	36	29	25	29	24	21	23	20	17	18	15	13	11				
9	48	36	28	23	43	33	26	22	27	22	18	21	18	15	16	14	12	9				
10	44	33	26	21	40	30	24	19	25	20	16	20	16	13	15	12	11	8				

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	0.9
10°-20°	245.5	3.2
20°-30°	407.9	5.2
30°-40°	514.6	6.6
40°-50°	550.1	7.1
50°-60°	485.5	6.2
60°-70°	311.6	4.0
70°-80°	138.2	1.8
80°-90°	37.9	0.5
90°-100°	123.8	1.6
100°-110°	821.0	10.5
110°-120°	1111.0	14.3
120°-130°	903.4	11.6
130°-140°	724.6	9.3
140°-150°	571.0	7.3
150°-160°	417.5	5.4
160°-170°	259.3	3.3
170°-180°	88.4	1.1
0°-30°	727.3	9.3
0°-40°	1241.9	16.0
0°-60°	2277.4	29.3
0°-90°	2765.1	35.5
90°-120°	2055.8	26.4
90°-150°	4254.8	54.7
90°-180°	5020.0	64.5
0°-180°	7785.2	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	17	22	28	24	10
95°	65	99	55	58	68	66
105°	193	289	1064	1354	895	204
115°	330	397	918	1899	2217	328
125°	467	530	865	1506	1778	415
135°	573	636	866	1239	1422	442
145°	679	736	872	1079	1194	426
155°	796	824	889	978	1024	365
165°	883	895	913	936	954	248
175°	930	936	930	924	918	88
180°	930	930	930	930	930	



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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	17.0	17.8	17.5	15.6
90°	11.7	17.4	21.8	27.5	24.3
92.5°	29.8	31.6	34.5	43.7	45.0
95°	65.2	98.7	55.2	57.9	67.7
97.5°	99.5	178.1	350.4	104.8	89.4
100°	126.2	218.6	695.4	206.5	136.2
102.5°	153.0	251.2	938.8	538.2	294.0
105°	193.1	288.7	1064.0	1354.4	895.1
107.5°	234.9	305.2	1016.0	1970.4	1844.0
110°	261.6	328.6	987.9	2070.3	2223.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	289.7	356.7	959.8	2011.9	2270.0
115°	330.1	397.2	917.7	1898.6	2217.3
117.5°	373.1	439.3	907.2	1776.0	2103.8
120°	404.5	467.5	888.4	1682.7	2024.2
122.5°	427.9	494.1	863.7	1602.5	1916.6
125°	467.2	530.1	865.0	1505.6	1778.5
127.5°	499.5	564.8	864.5	1392.9	1662.7
130°	518.2	586.8	869.2	1316.3	1573.8
132.5°	538.9	607.6	866.5	1282.5	1494.2
135°	573.3	636.3	865.9	1238.6	1421.7
137.5°	602.6	670.1	865.9	1190.0	1346.8
140°	626.0	688.9	865.9	1161.6	1304.6
142.5°	649.4	707.7	870.5	1128.7	1262.5
145°	678.6	735.9	871.7	1079.1	1193.5
147.5°	713.8	764.1	878.7	1043.4	1131.5
150°	737.2	782.9	883.4	1019.7	1094.0
152.5°	760.6	801.7	883.4	1000.6	1061.3
155°	795.7	824.3	889.3	978.1	1023.8
157.5°	823.7	851.2	896.3	963.7	996.9
160°	842.5	865.3	901.0	954.3	982.9
162.5°	856.5	879.4	905.6	949.4	968.8
165°	883.4	894.9	912.7	936.5	953.6
167.5°	898.6	908.9	918.5	930.4	940.7
170°	912.7	918.4	918.5	930.3	936.1
172.5°	917.3	927.6	923.2	925.7	931.4
175°	930.2	935.9	930.2	924.2	918.5
177.5°	930.2	934.8	930.2	930.1	925.5
180°	930.2	930.2	930.2	930.2	930.2

(END OF REPORT)