

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: P644882

Luminaire Tested: OMN4DIP-SR4F0-50D125U840-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644882
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-SR4F0-50D125U840-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

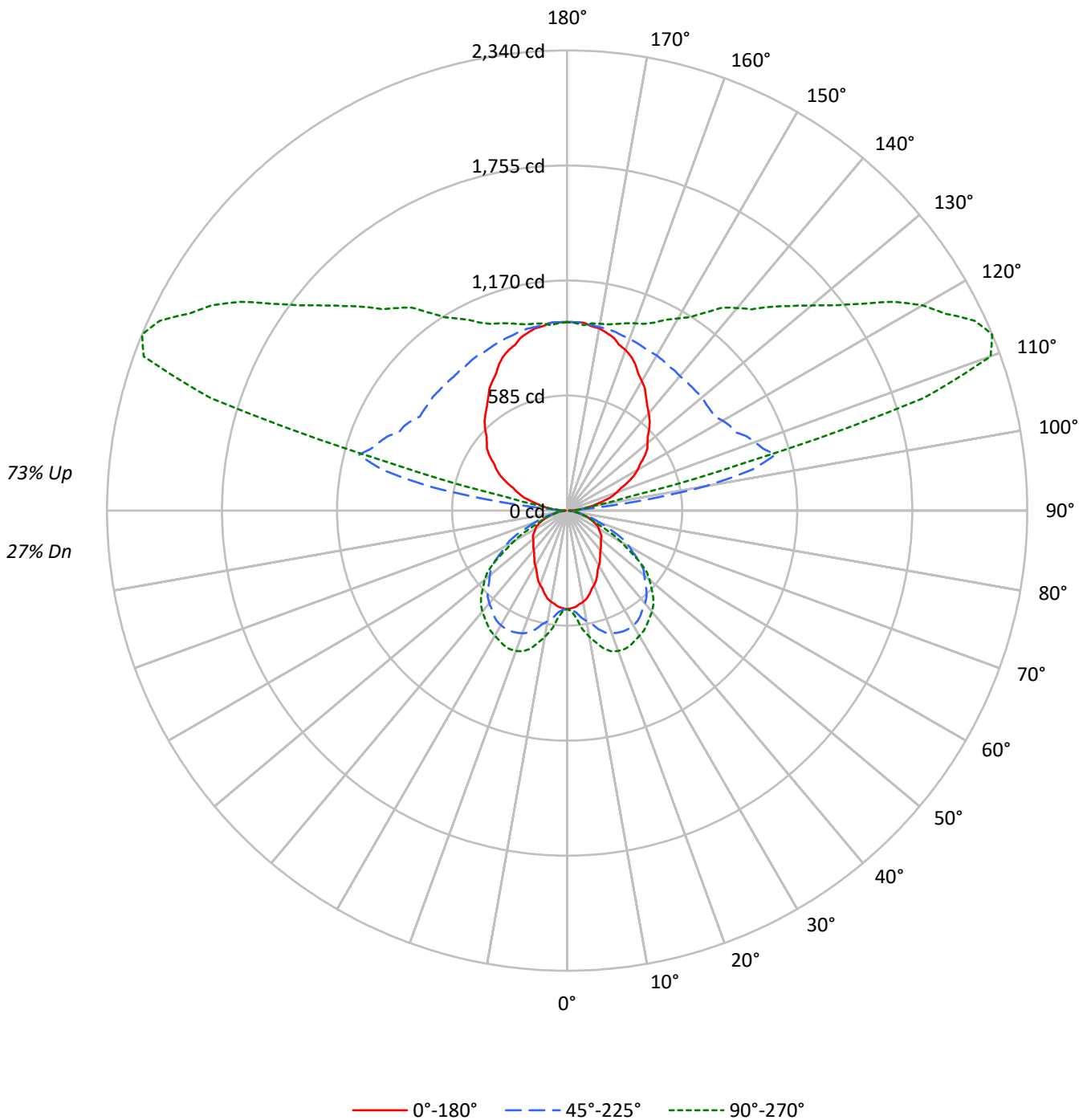
Lumens per Lamp: N/A
Luminaire Lumens: 7090.8 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 52.5
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									
RC	80									70									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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27																			
1	93	89	85	81	83	79	76	73	62	60	58	46	45	43	31	30	30	23																			
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25	19																			
3	77	68	61	55	68	61	55	50	48	43	40	35	33	30	24	23	21	16																			
4	70	60	52	46	62	54	47	42	42	38	34	31	28	26	21	20	18	14																			
5	64	53	45	39	57	48	41	36	38	33	29	28	25	22	19	17	16	12																			
6	59	47	40	34	52	43	36	31	34	29	25	25	22	19	17	15	14	10																			
7	54	43	35	29	48	38	32	27	30	25	22	23	19	17	16	14	12	9																			
8	50	38	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8																			
9	47	35	28	23	42	31	25	21	25	20	17	19	16	13	13	11	10	7																			
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	9	6																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8091	8091	8091
5°	7971	8425	8916
10°	7719	9361	10681
15°	7345	10460	12176
20°	6909	11414	13055
25°	6437	12063	13495
30°	6018	12558	13711
35°	5744	12818	13943
40°	5552	12969	14124
45°	5562	13013	14129
50°	5649	12881	13730
55°	5906	12631	12467
60°	6022	11741	10123
65°	6101	10285	7435
70°	5830	8087	5778
75°	5234	6032	4872
80°	4444	4770	3905
85°	4316	3890	3242

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14129 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	0.7
10°-20°	170.8	2.4
20°-30°	283.7	4.0
30°-40°	357.9	5.0
40°-50°	382.6	5.4
50°-60°	337.7	4.8
60°-70°	216.8	3.1
70°-80°	96.1	1.4
80°-90°	27.1	0.4
90°-100°	124.5	1.8
100°-110°	844.2	11.9
110°-120°	1143.6	16.1
120°-130°	930.2	13.1
130°-140°	746.8	10.5
140°-150°	588.6	8.3
150°-160°	430.4	6.1
160°-170°	267.3	3.8
170°-180°	91.2	1.3
0°-30°	505.9	7.1
0°-40°	863.9	12.2
0°-60°	1584.2	22.3
0°-90°	1924.2	27.1
90°-120°	2112.3	29.8
90°-150°	4377.8	61.7
90°-180°	5167.0	72.9
0°-180°	7090.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	501	501	501	501	501	
5°	492	507	520	538	550	46
15°	439	507	626	701	728	123
25°	361	490	677	740	758	166
35°	291	448	650	693	707	183
45°	244	383	570	605	619	188
55°	210	301	449	451	443	186
65°	160	202	269	219	195	156
75°	84	93	97	83	78	90
85°	23	20	21	19	18	25
90°	8	14	19	25	23	8
95°	61	98	54	58	69	63
105°	195	294	1095	1396	923	206
115°	338	407	944	1956	2286	335
125°	480	545	890	1551	1833	426
135°	591	656	892	1277	1465	455
145°	700	758	898	1112	1230	439
155°	820	850	917	1008	1055	376
165°	911	922	941	965	983	256
175°	959	965	959	953	947	91
180°	959	959	959	959	959	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	501.1	501.1	501.1	501.1	501.1
2.5°	497.4	504.7	504.9	507.7	511.4
5°	491.8	506.6	519.8	537.5	550.1
7.5°	480.1	506.6	548.7	589.9	610.4
10°	470.8	507.3	571.0	626.4	651.5
12.5°	458.7	507.0	593.4	660.0	688.8
15°	439.4	506.6	625.8	701.0	728.4
17.5°	417.0	504.5	651.2	726.6	750.5
20°	402.1	502.3	664.3	735.9	759.8
22.5°	385.3	497.4	671.7	740.5	762.6
25°	361.3	490.0	677.1	740.4	757.5
27.5°	337.7	479.5	677.3	731.0	745.6
30°	322.8	471.0	673.6	721.7	735.4
32.5°	309.8	461.5	666.1	710.5	725.1
35°	291.4	447.5	650.3	692.6	707.4
37.5°	275.5	431.4	630.2	671.4	688.8
40°	263.4	418.4	615.3	656.4	670.1
42.5°	254.1	404.5	597.6	637.7	649.6
45°	243.6	382.6	569.9	605.2	618.8
47.5°	232.4	360.0	537.9	571.2	580.1
50°	224.9	343.4	512.8	543.2	546.6
52.5°	220.3	326.0	488.5	507.7	508.3
55°	209.8	300.9	448.7	450.8	442.9
57.5°	195.8	271.7	398.1	386.7	367.6
60°	186.5	251.4	363.6	340.8	313.5
62.5°	177.1	232.1	327.2	290.4	258.5
65°	159.7	201.8	269.2	218.6	194.6
67.5°	139.4	168.6	211.4	163.5	147.5
70°	123.5	146.3	171.3	133.8	122.4
72.5°	108.6	124.1	138.7	110.6	104.7
75°	83.9	93.0	96.7	82.6	78.1
77.5°	61.8	62.2	67.1	58.2	55.9
80°	47.8	45.5	51.3	44.2	42.0
82.5°	36.6	33.4	37.3	32.1	30.8
85°	23.3	19.9	21.0	18.6	17.5
87.5°	13.8	12.2	13.1	13.4	12.0
90°	8.2	14.1	19.1	25.0	22.8
92.5°	25.4	28.6	32.6	42.6	45.0
95°	61.1	97.8	54.1	58.0	68.7
97.5°	97.1	179.7	359.0	106.9	91.6
100°	125.1	221.9	715.1	211.8	139.9
102.5°	153.1	255.5	965.9	554.1	303.0
105°	195.1	294.2	1095.0	1395.5	922.6
107.5°	238.3	311.7	1045.5	2030.4	1900.7
110°	266.3	335.9	1016.6	2133.4	2291.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	295.2	364.9	987.6	2073.2	2339.7
115°	337.5	407.1	944.2	1956.4	2285.5
117.5°	381.9	450.5	933.4	1830.0	2168.5
120°	414.7	479.6	914.1	1733.8	2086.5
122.5°	438.8	507.5	889.0	1651.2	1975.5
125°	479.9	544.7	889.9	1551.3	1833.2
127.5°	513.7	580.6	890.0	1435.2	1713.8
130°	533.0	603.7	894.8	1356.8	1622.1
132.5°	555.3	626.0	892.9	1322.0	1540.1
135°	591.0	655.8	892.5	1276.7	1465.4
137.5°	621.1	690.7	892.5	1226.6	1388.2
140°	645.2	710.1	892.5	1197.3	1344.7
142.5°	669.4	729.5	897.3	1163.4	1301.3
145°	699.5	758.5	898.5	1112.2	1230.2
147.5°	735.7	787.6	905.7	1075.5	1166.3
150°	759.8	807.0	910.6	1051.0	1127.7
152.5°	783.9	826.4	910.6	1031.4	1093.9
155°	820.1	849.6	916.6	1008.1	1055.3
157.5°	849.1	877.4	923.8	993.4	1027.6
160°	868.4	891.9	928.7	983.6	1013.1
162.5°	882.8	906.4	933.5	978.6	998.6
165°	910.6	922.4	940.7	965.2	982.9
167.5°	926.2	936.9	946.8	959.1	969.7
170°	940.7	946.6	946.8	958.9	964.8
172.5°	945.5	956.2	951.6	954.1	960.0
175°	958.8	964.7	958.8	952.6	946.8
177.5°	958.8	963.5	958.8	958.7	954.0
180°	958.8	958.8	958.8	958.8	958.8

(END OF REPORT)