

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: P644522

Luminaire Tested: OMN4DIP-SR4F0-100D125U840-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644522
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-SR4F0-100D125U840-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

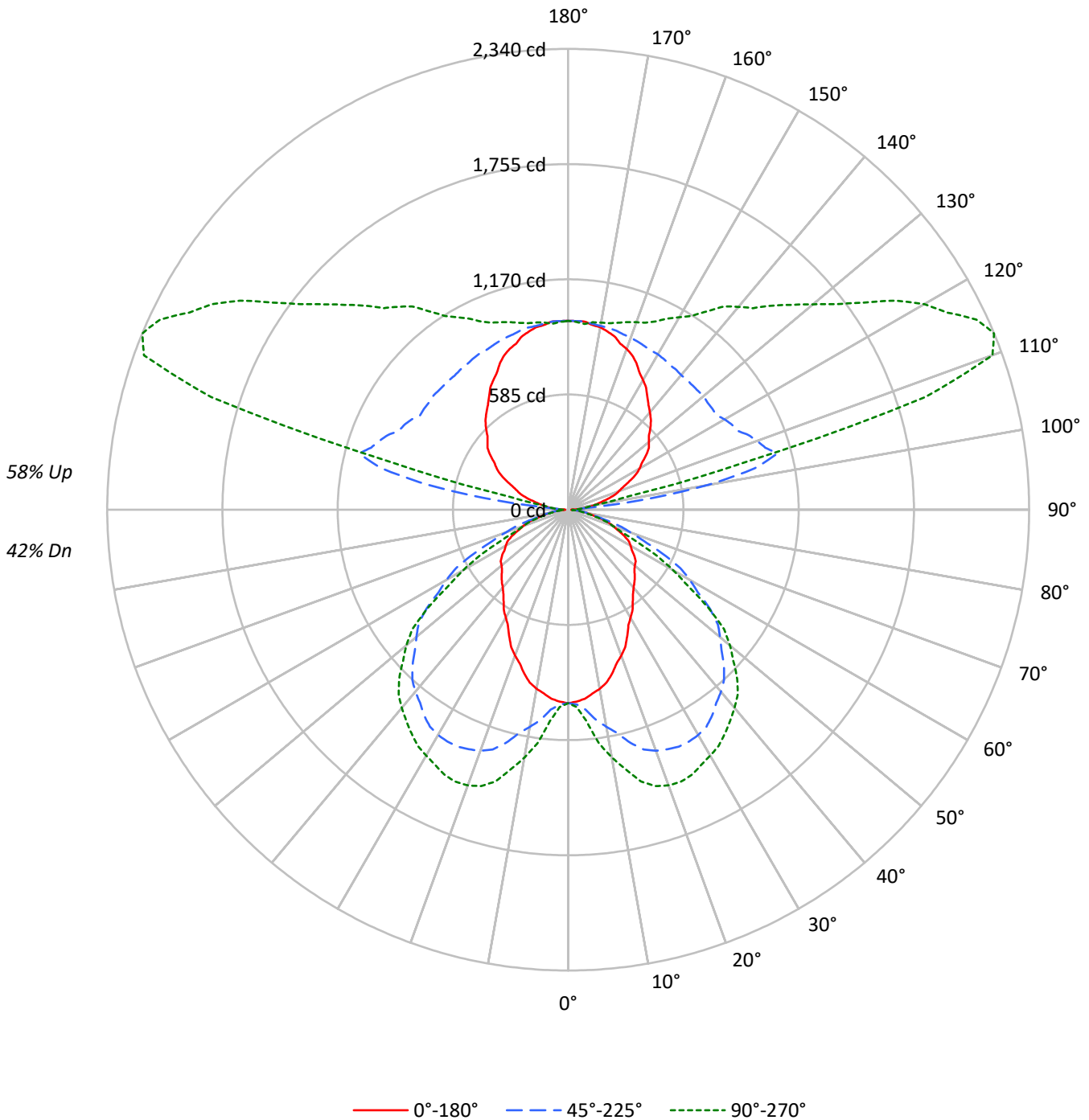
Lumens per Lamp: N/A
Luminaire Lumens: 8952.4 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.1
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	65	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25	21
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15862	15862	15862
5°	15627	16515	17478
10°	15133	18354	20940
15°	14397	20508	23870
20°	13543	22376	25596
25°	12618	23648	26457
30°	11800	24621	26878
35°	11259	25129	27334
40°	10884	25425	27689
45°	10903	25510	27702
50°	11077	25252	26914
55°	11578	24760	24439
60°	11806	23018	19846
65°	11958	20164	14579
70°	11434	15857	11325
75°	10262	11828	9551
80°	8712	9345	7652
85°	8466	7614	6354

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 27702 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.8	1.1
10°-20°	334.8	3.7
20°-30°	556.3	6.2
30°-40°	701.7	7.8
40°-50°	750.2	8.4
50°-60°	662.1	7.4
60°-70°	425.0	4.7
70°-80°	188.4	2.1
80°-90°	51.0	0.6
90°-100°	130.7	1.5
100°-110°	848.3	9.5
110°-120°	1146.7	12.8
120°-130°	932.2	10.4
130°-140°	747.0	8.3
140°-150°	588.6	6.6
150°-160°	430.4	4.8
160°-170°	267.3	3.0
170°-180°	91.2	1.0
0°-30°	991.9	11.1
0°-40°	1693.6	18.9
0°-60°	3105.9	34.7
0°-90°	3770.3	42.1
90°-120°	2125.7	23.7
90°-150°	4393.4	49.1
90°-180°	5182.0	57.9
0°-180°	8952.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	964	993	1019	1054	1078	91
15°	861	993	1227	1374	1428	241
25°	708	961	1327	1452	1485	326
35°	571	877	1275	1358	1387	359
45°	478	750	1117	1186	1213	369
55°	411	590	880	884	868	365
65°	313	396	528	428	382	306
75°	164	182	190	162	153	176
85°	46	39	41	36	34	48
90°	16	22	26	32	27	13
95°	73	106	60	61	71	73
105°	203	301	1098	1397	923	215
115°	343	412	948	1958	2286	341
125°	483	548	893	1552	1833	429
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°	982.4	982.4	982.4	982.4	982.4
2.5°	975.1	989.4	989.8	995.4	1002.5
5°	964.2	993.2	1019.0	1053.8	1078.4
7.5°	941.3	993.1	1075.7	1156.5	1196.7
10°	923.0	994.5	1119.5	1228.0	1277.2
12.5°	899.3	994.0	1163.4	1294.0	1350.3
15°	861.3	993.2	1226.9	1374.4	1428.0
17.5°	817.5	989.1	1276.7	1424.5	1471.4
20°	788.2	984.8	1302.3	1442.7	1489.7
22.5°	755.3	975.2	1316.9	1451.8	1495.1
25°	708.3	960.7	1327.4	1451.6	1485.1
27.5°	662.1	940.0	1327.9	1433.2	1461.8
30°	632.9	923.3	1320.6	1414.9	1441.7
32.5°	607.3	904.9	1306.0	1393.0	1421.6
35°	571.2	877.2	1274.9	1357.8	1386.8
37.5°	540.1	845.7	1235.6	1316.3	1350.3
40°	516.4	820.2	1206.3	1286.9	1313.7
42.5°	498.1	793.0	1171.6	1250.3	1273.5
45°	477.5	750.1	1117.2	1186.4	1213.2
47.5°	455.6	705.8	1054.6	1119.9	1137.3
50°	441.0	673.3	1005.3	1064.8	1071.5
52.5°	431.8	639.1	957.8	995.3	996.6
55°	411.3	590.0	879.6	883.8	868.2
57.5°	383.8	532.6	780.5	758.1	720.6
60°	365.6	492.9	712.8	668.2	614.6
62.5°	347.3	455.0	641.6	569.3	506.8
65°	313.0	395.7	527.8	428.5	381.6
67.5°	273.3	330.4	414.5	320.5	289.2
70°	242.2	286.9	335.9	262.2	239.9
72.5°	212.9	243.3	271.9	216.8	205.2
75°	164.5	182.4	189.6	162.0	153.1
77.5°	121.1	122.0	131.6	114.1	109.7
80°	93.7	89.2	100.5	86.7	82.3
82.5°	71.7	65.5	73.1	63.0	60.3
85°	45.7	39.0	41.1	36.5	34.3
87.5°	27.0	22.8	23.4	22.7	20.1
90°	16.0	21.9	25.8	31.7	27.2
92.5°	35.9	36.5	38.4	47.4	47.7
95°	73.4	105.7	59.7	61.3	70.9
97.5°	108.0	187.4	363.3	109.1	92.7
100°	135.1	228.7	718.4	214.0	141.0
102.5°	162.3	262.3	969.3	555.4	303.2
105°	202.9	300.9	1098.3	1396.6	922.6
107.5°	245.9	317.3	1048.9	2031.5	1900.7
110°	273.0	341.5	1019.9	2134.5	2291.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	302.0	370.5	991.0	2074.3	2339.7
115°	343.1	411.6	947.6	1957.5	2285.5
117.5°	387.3	455.0	936.7	1831.1	2168.5
120°	419.2	484.1	917.4	1734.9	2086.5
122.5°	443.3	511.1	891.5	1652.3	1975.5
125°	483.2	548.1	893.3	1552.4	1833.2
127.5°	515.9	583.8	892.2	1436.1	1713.8
130°	535.2	606.0	897.0	1356.8	1622.1
132.5°	555.7	626.5	893.4	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)