

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: P644544

Luminaire Tested: OMN4DIP-SR4F0-100D150U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644544
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-SR4F0-100D150U830-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

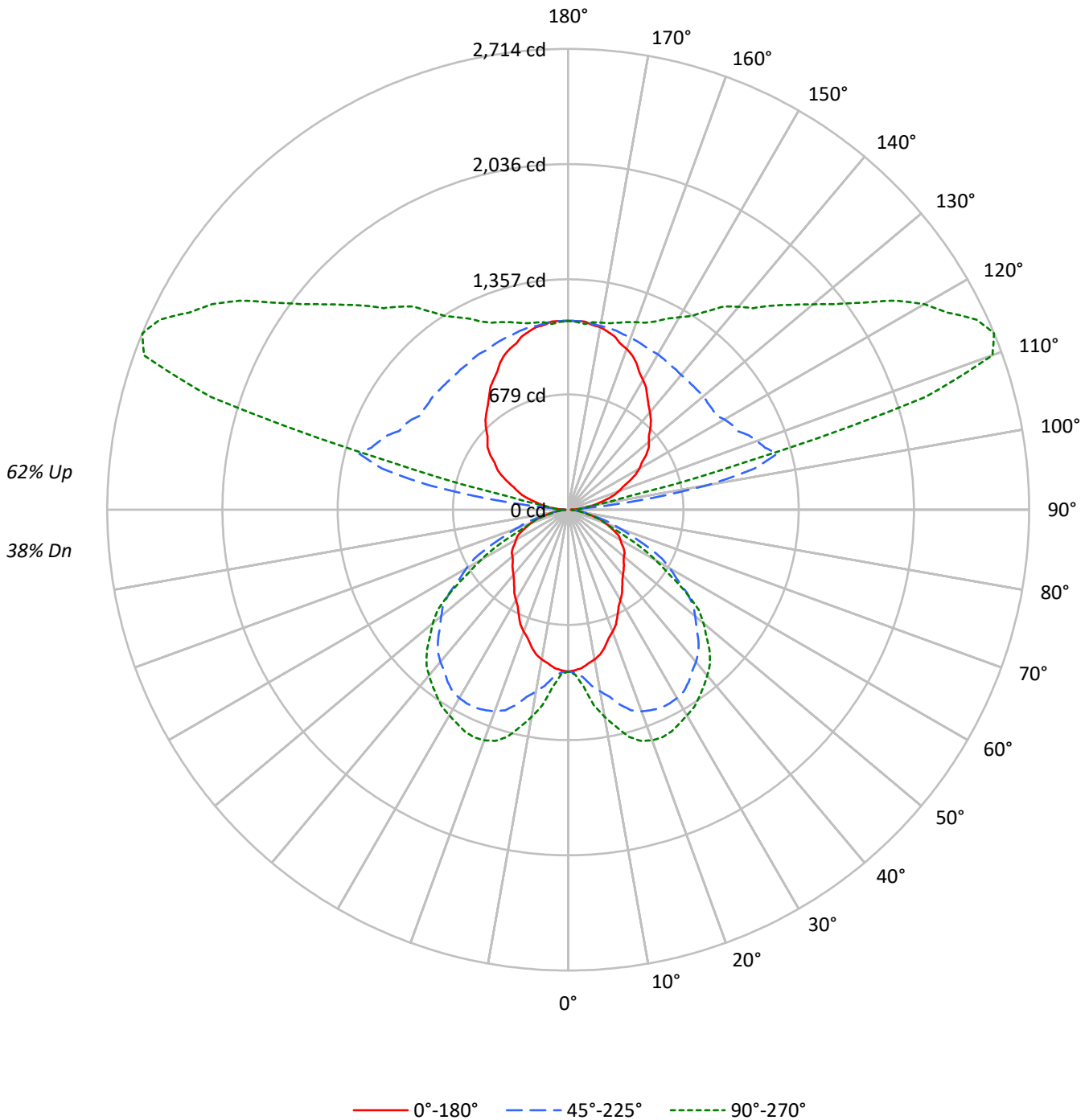
Lumens per Lamp: N/A
Luminaire Lumens: 9662.8 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78.5
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	50	30	10	0	
RCR																						
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38	32				
2	87	79	73	68	78	72	67	63	59	55	52	46	44	42	35	33	32	27				
3	79	70	62	57	71	63	57	52	52	47	44	41	38	35	31	29	27	23				
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	28	25	23	19				
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	25	22	20	17				
6	61	49	41	35	55	45	38	32	37	31	27	29	25	22	22	20	18	14				
7	56	44	36	30	51	40	33	28	33	28	24	26	23	20	20	18	15	13				
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11				
9	48	36	29	24	44	33	26	22	27	22	19	22	18	15	17	14	12	10				
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	16	13	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15389	15389	15389
5°	15161	16023	16956
10°	14682	17807	20315
15°	13969	19896	23158
20°	13139	21710	24831
25°	12241	22942	25668
30°	11447	23886	26077
35°	10924	24380	26520
40°	10560	24668	26863
45°	10579	24749	26875
50°	10746	24498	26113
55°	11232	24023	23710
60°	11454	22333	19256
65°	11603	19561	14143
70°	11094	15380	10985
75°	9956	11478	9264
80°	8452	9066	7420
85°	8207	7392	6150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 26875 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	1.0
10°-20°	324.9	3.4
20°-30°	539.7	5.6
30°-40°	680.8	7.0
40°-50°	727.8	7.5
50°-60°	642.4	6.6
60°-70°	412.3	4.3
70°-80°	182.8	1.9
80°-90°	49.9	0.5
90°-100°	149.2	1.5
100°-110°	982.3	10.2
110°-120°	1328.8	13.8
120°-130°	1080.5	11.2
130°-140°	866.3	9.0
140°-150°	682.6	7.1
150°-160°	499.1	5.2
160°-170°	310.0	3.2
170°-180°	105.7	1.1
0°-30°	962.3	10.0
0°-40°	1643.1	17.0
0°-60°	3013.3	31.2
0°-90°	3658.2	37.9
90°-120°	2460.3	25.5
90°-150°	5089.7	52.7
90°-180°	6005.0	62.1
0°-180°	9662.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	953	953	953	953	953	
5°	935	964	989	1022	1046	88
15°	836	964	1190	1333	1385	234
25°	687	932	1288	1408	1441	316
35°	554	851	1237	1317	1346	348
45°	463	728	1084	1151	1177	358
55°	399	572	853	858	842	354
65°	304	384	512	416	370	297
75°	160	177	184	157	148	170
85°	44	38	40	35	33	47
90°	16	22	27	34	30	13
95°	80	120	67	70	81	81
105°	232	346	1273	1619	1070	246
115°	396	476	1098	2270	2651	393
125°	559	634	1035	1800	2126	497
135°	685	761	1035	1481	1700	528
145°	811	880	1042	1290	1427	510
155°	951	985	1063	1169	1224	437
165°	1056	1070	1091	1120	1140	297
175°	1112	1119	1112	1105	1098	105
180°	1112	1112	1112	1112	1112	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	953.1	953.1	953.1	953.1	953.1
2.5°	946.0	959.9	960.2	965.7	972.6
5°	935.4	963.6	988.6	1022.4	1046.2
7.5°	913.2	963.5	1043.6	1122.0	1161.1
10°	895.5	964.9	1086.1	1191.4	1239.1
12.5°	872.5	964.4	1128.7	1255.4	1310.0
15°	835.7	963.5	1190.3	1333.4	1385.4
17.5°	793.1	959.6	1238.6	1382.0	1427.5
20°	764.7	955.5	1263.5	1399.7	1445.2
22.5°	732.8	946.1	1277.6	1408.5	1450.5
25°	687.1	932.1	1287.8	1408.3	1440.8
27.5°	642.4	912.0	1288.3	1390.4	1418.2
30°	614.0	895.8	1281.2	1372.7	1398.7
32.5°	589.2	877.9	1267.0	1351.4	1379.2
35°	554.2	851.1	1236.9	1317.3	1345.5
37.5°	524.0	820.5	1198.7	1277.1	1310.0
40°	501.0	795.7	1170.4	1248.5	1274.5
42.5°	483.2	769.3	1136.7	1213.0	1235.5
45°	463.3	727.7	1083.9	1151.0	1177.0
47.5°	442.0	684.7	1023.2	1086.5	1103.4
50°	427.8	653.2	975.3	1033.1	1039.6
52.5°	418.9	620.1	929.2	965.6	966.9
55°	399.0	572.4	853.4	857.5	842.3
57.5°	372.4	516.7	757.2	735.5	699.1
60°	354.7	478.2	691.6	648.3	596.3
62.5°	336.9	441.4	622.4	552.3	491.6
65°	303.7	383.9	512.0	415.7	370.2
67.5°	265.1	320.6	402.1	311.0	280.6
70°	235.0	278.3	325.8	254.4	232.7
72.5°	206.6	236.1	263.8	210.3	199.1
75°	159.6	176.9	184.0	157.2	148.5
77.5°	117.5	118.3	127.7	110.7	106.4
80°	90.9	86.5	97.5	84.1	79.8
82.5°	69.6	63.5	70.9	61.1	58.5
85°	44.3	37.8	39.9	35.4	33.2
87.5°	26.2	22.3	23.2	22.8	20.2
90°	15.5	22.4	27.3	34.2	29.8
92.5°	37.6	39.3	42.3	53.1	54.3
95°	80.3	119.5	67.0	69.9	81.4
97.5°	121.0	214.4	419.7	125.7	107.1
100°	152.8	262.6	832.0	247.3	163.1
102.5°	184.6	301.6	1122.9	643.7	351.6
105°	232.3	346.4	1272.6	1619.4	1070.1
107.5°	282.3	365.9	1215.3	2355.9	2204.6
110°	314.1	394.0	1181.7	2475.4	2657.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	347.6	427.5	1148.1	2405.5	2713.8
115°	395.8	475.7	1097.8	2270.0	2650.8
117.5°	447.1	526.0	1085.2	2123.4	2515.2
120°	484.5	559.7	1062.8	2011.9	2420.0
122.5°	512.5	591.4	1033.0	1916.0	2291.3
125°	559.2	634.4	1034.8	1800.2	2126.3
127.5°	597.6	675.9	1034.0	1665.4	1987.8
130°	619.9	702.0	1039.6	1573.7	1881.5
132.5°	644.4	726.4	1036.0	1533.3	1786.3
135°	685.4	760.7	1035.2	1480.8	1699.6
137.5°	720.4	801.1	1035.2	1422.7	1610.1
140°	748.4	823.6	1035.2	1388.8	1559.7
142.5°	776.4	846.1	1040.8	1349.3	1509.4
145°	811.3	879.7	1042.2	1290.1	1426.8
147.5°	853.3	913.5	1050.5	1247.4	1352.7
150°	881.3	936.0	1056.1	1219.0	1307.9
152.5°	909.3	958.5	1056.1	1196.3	1268.8
155°	951.2	985.4	1063.1	1169.3	1224.0
157.5°	984.8	1017.6	1071.5	1152.2	1191.8
160°	1007.2	1034.5	1077.1	1140.8	1175.0
162.5°	1024.0	1051.3	1082.7	1135.0	1158.3
165°	1056.1	1069.8	1091.1	1119.6	1140.1
167.5°	1074.3	1086.6	1098.1	1112.4	1124.7
170°	1091.1	1098.0	1098.1	1112.3	1119.1
172.5°	1096.7	1109.0	1103.7	1106.7	1113.5
175°	1112.1	1118.9	1112.1	1104.9	1098.1
177.5°	1112.1	1117.6	1112.1	1112.0	1106.5
180°	1112.1	1112.1	1112.1	1112.1	1112.1

(END OF REPORT)