

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: P644509

Luminaire Tested: OMN4DIP-SR4F0-100D100U940-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644509
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-SR4F0-100D100U940-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

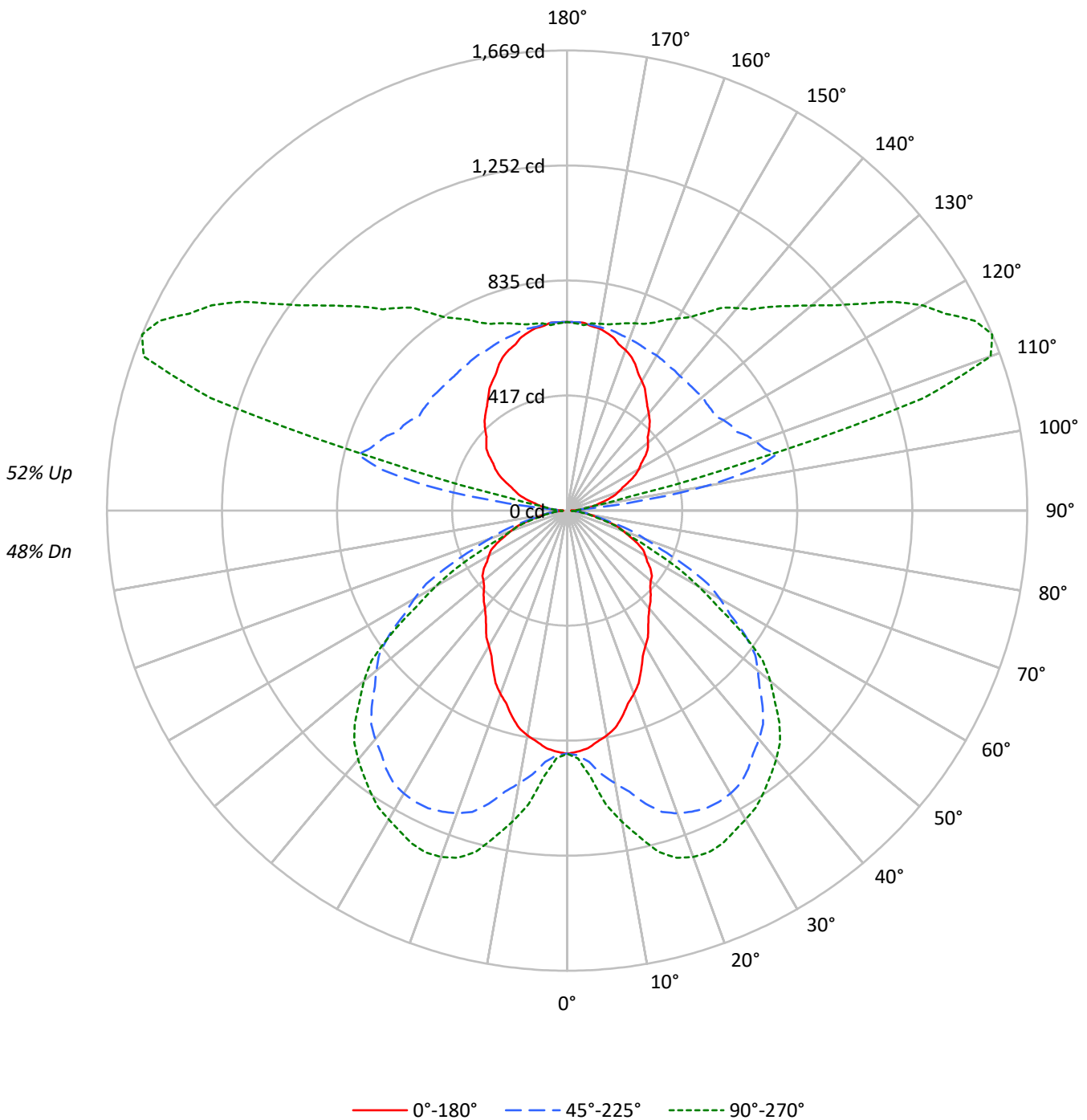
Lumens per Lamp: N/A
Luminaire Lumens: 7085.1 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.9
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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48				48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46				40	
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39				34	
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33				29	
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28				24	
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24				21	
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21				18	
7	57	45	37	31	53	42	35	30	36	30	26	30	25	22	24	21	19				16	
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17				14	
9	49	37	30	24	45	34	28	23	30	24	20	25	21	18	20	17	15				13	
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13				11	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14236	14236	14236
5°	14024	14822	15686
10°	13580	16472	18792
15°	12921	18404	21421
20°	12155	20081	22969
25°	11323	21223	23742
30°	10590	22095	24121
35°	10104	22551	24532
40°	9767	22818	24850
45°	9784	22893	24859
50°	9939	22662	24154
55°	10390	22221	21931
60°	10595	20657	17809
65°	10732	18094	13081
70°	10258	14228	10164
75°	9208	10618	8571
80°	7820	8387	6862
85°	7595	6836	5706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 24859 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	1.3
10°-20°	300.5	4.2
20°-30°	499.2	7.0
30°-40°	629.8	8.9
40°-50°	673.2	9.5
50°-60°	594.2	8.4
60°-70°	381.3	5.4
70°-80°	169.1	2.4
80°-90°	45.4	0.6
90°-100°	95.6	1.3
100°-110°	606.5	8.6
110°-120°	819.0	11.6
120°-130°	665.6	9.4
130°-140°	532.8	7.5
140°-150°	419.8	5.9
150°-160°	306.9	4.3
160°-170°	190.7	2.7
170°-180°	65.0	0.9
0°-30°	890.1	12.6
0°-40°	1519.9	21.5
0°-60°	2787.3	39.3
0°-90°	3383.1	47.7
90°-120°	1521.2	21.5
90°-150°	3139.4	44.3
90°-180°	3702.0	52.3
0°-180°	7085.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	865	891	914	946	968	81
15°	773	891	1101	1233	1282	216
25°	636	862	1191	1303	1333	293
35°	513	787	1144	1218	1245	322
45°	428	673	1003	1065	1089	331
55°	369	530	789	793	779	327
65°	281	355	474	384	342	275
75°	148	164	170	145	137	158
85°	41	35	37	33	31	43
90°	14	19	21	25	21	11
95°	57	78	45	45	51	55
105°	148	217	785	996	658	157
115°	247	295	677	1397	1630	245
125°	346	392	638	1108	1308	307
135°	422	468	637	911	1045	325
145°	499	541	641	793	877	313
155°	585	606	654	719	753	269
165°	650	658	671	688	701	182
175°	684	688	684	680	675	65
180°	684	684	684	684	684	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	881.7	881.7	881.7	881.7	881.7
2.5°	875.1	887.9	888.2	893.3	899.7
5°	865.3	891.3	914.5	945.7	967.8
7.5°	844.8	891.3	965.3	1037.9	1074.0
10°	828.3	892.5	1004.7	1102.0	1146.2
12.5°	807.0	892.0	1044.0	1161.2	1211.8
15°	773.0	891.3	1101.0	1233.4	1281.5
17.5°	733.6	887.6	1145.7	1278.3	1320.4
20°	707.4	883.8	1168.7	1294.7	1336.8
22.5°	677.9	875.1	1181.8	1302.9	1341.8
25°	635.6	862.2	1191.3	1302.7	1332.7
27.5°	594.2	843.6	1191.7	1286.2	1311.8
30°	568.0	828.6	1185.1	1269.7	1293.8
32.5°	545.0	812.0	1172.0	1250.1	1275.7
35°	512.6	787.2	1144.1	1218.5	1244.6
37.5°	484.7	759.0	1108.8	1181.3	1211.8
40°	463.4	736.0	1082.6	1154.9	1179.0
42.5°	447.0	711.6	1051.4	1122.0	1142.9
45°	428.5	673.1	1002.6	1064.7	1088.7
47.5°	408.8	633.4	946.4	1005.0	1020.7
50°	395.7	604.2	902.2	955.6	961.6
52.5°	387.5	573.6	859.5	893.2	894.4
55°	369.1	529.5	789.4	793.2	779.1
57.5°	344.5	478.0	700.4	680.4	646.7
60°	328.1	442.3	639.7	599.7	551.5
62.5°	311.7	408.3	575.7	510.9	454.8
65°	280.9	355.1	473.6	384.5	342.4
67.5°	245.2	296.5	371.9	287.6	259.6
70°	217.3	257.4	301.4	235.3	215.3
72.5°	191.1	218.4	244.0	194.5	184.1
75°	147.6	163.7	170.2	145.4	137.4
77.5°	108.7	109.5	118.1	102.4	98.4
80°	84.1	80.1	90.2	77.8	73.8
82.5°	64.4	58.8	65.6	56.5	54.1
85°	41.0	35.0	36.9	32.8	30.8
87.5°	24.2	20.2	20.6	19.7	17.3
90°	14.4	18.6	20.9	25.1	21.1
92.5°	29.6	29.0	29.6	35.7	35.0
95°	57.0	78.4	44.7	45.0	51.4
97.5°	81.2	136.6	260.7	78.7	66.6
100°	100.2	165.7	513.7	153.4	101.0
102.5°	119.2	189.6	692.6	396.6	216.3
105°	147.7	217.2	784.7	996.5	658.1
107.5°	178.2	228.5	749.4	1449.4	1355.7
110°	197.2	245.7	728.7	1522.9	1634.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	217.9	266.4	708.1	1479.9	1668.8
115°	246.8	295.3	677.1	1396.6	1630.1
117.5°	278.2	326.3	669.4	1306.4	1546.7
120°	300.7	346.9	655.6	1237.9	1488.2
122.5°	317.9	365.9	636.8	1178.9	1409.0
125°	345.9	392.2	638.4	1107.7	1307.5
127.5°	368.8	417.5	637.2	1024.6	1222.4
130°	382.6	433.1	640.7	967.7	1157.0
132.5°	396.5	447.0	637.4	942.9	1098.5
135°	421.5	467.8	636.6	910.6	1045.2
137.5°	443.0	492.6	636.6	874.9	990.1
140°	460.2	506.5	636.6	854.0	959.1
142.5°	477.4	520.3	640.0	829.8	928.2
145°	498.9	541.0	640.9	793.3	877.4
147.5°	524.7	561.7	646.0	767.1	831.8
150°	541.9	575.6	649.5	749.6	804.3
152.5°	559.1	589.4	649.5	735.6	780.2
155°	585.0	606.0	653.8	719.0	752.7
157.5°	605.6	625.8	658.9	708.5	732.9
160°	619.4	636.2	662.4	701.6	722.6
162.5°	629.7	646.5	665.8	698.0	712.3
165°	649.5	657.9	671.0	688.5	701.1
167.5°	660.7	668.2	675.3	684.0	691.6
170°	671.0	675.2	675.3	684.0	688.2
172.5°	674.4	682.0	678.7	680.5	684.7
175°	683.9	688.1	683.9	679.5	675.3
177.5°	683.9	687.2	683.9	683.8	680.4
180°	683.9	683.9	683.9	683.9	683.9

(END OF REPORT)