

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: P644848

Luminaire Tested: OMN4DIP-SR4F0-50D100U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644848
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-SR4F0-50D100U835-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

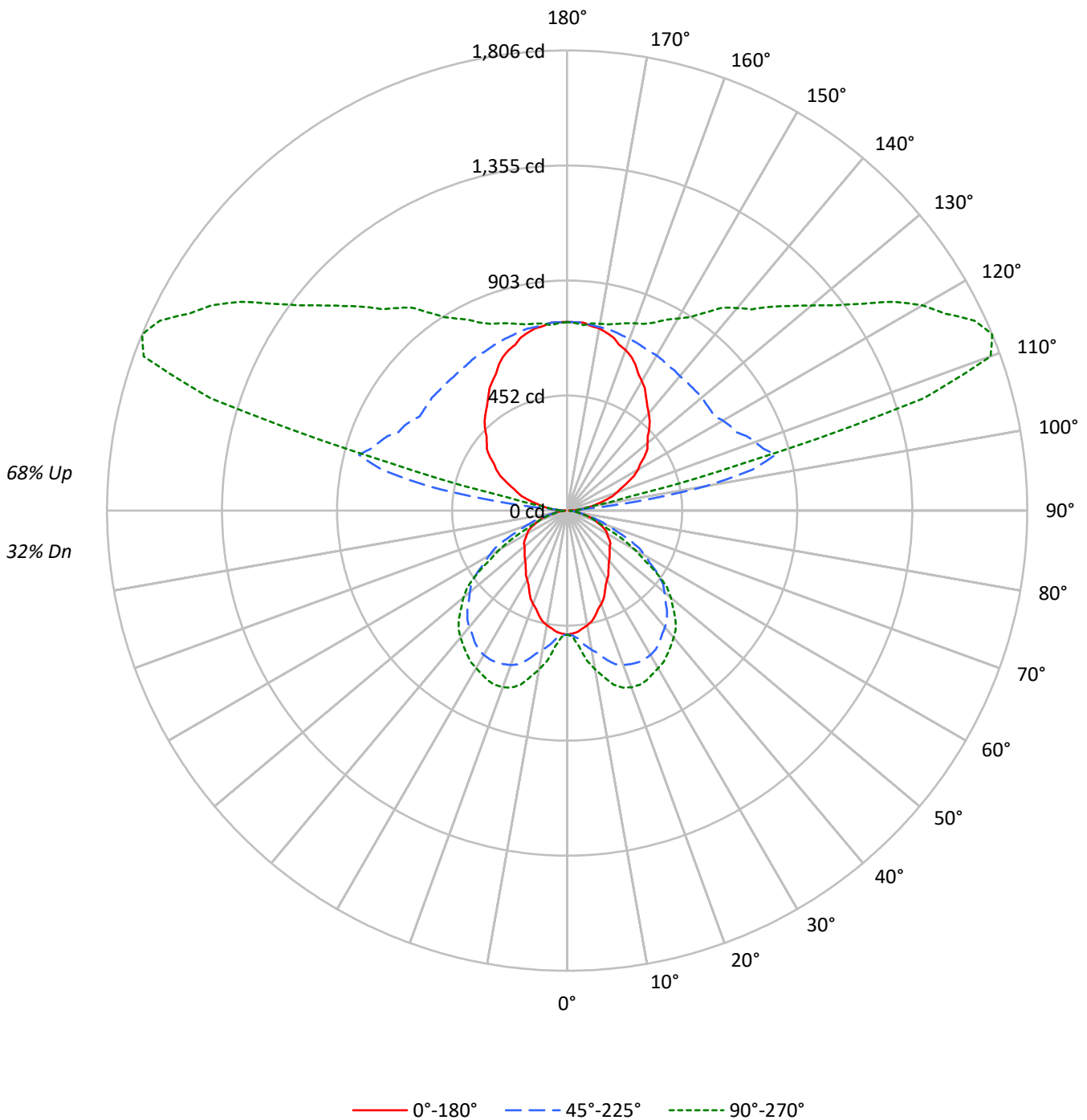
Lumens per Lamp: N/A
Luminaire Lumens: 5858.8 lumens
Efficiency: N/A
Efficacy: 135.3 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.3
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									
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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	39	39	39	39	39	39	39	39	39	32													
1	94	90	86	82	84	81	78	75	64	62	60	49	48	46	35	34	33	33	33	33	33	33	33	27													
2	85	78	72	67	77	71	66	61	56	53	50	43	41	39	31	29	28	28	28	28	28	28	28	23													
3	78	69	62	56	70	62	56	51	49	45	42	38	35	33	27	25	24	24	24	24	24	24	24	19													
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	20	20	20	20	20	20	16													
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	18	18	18	18	18	18	14													
6	60	48	40	34	53	43	37	32	35	30	26	27	23	21	20	17	15	15	15	15	15	15	15	12													
7	55	43	35	30	49	39	32	28	31	26	23	24	21	18	18	15	14	14	14	14	14	14	14	11													
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	16	14	12	12	12	12	12	12	12	9													
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	15	12	11	11	11	11	11	11	11	8													
10	44	32	25	21	40	29	23	19	24	19	16	19	15	13	14	11	10	10	10	10	10	10	10	8													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7857	7857	7857
5°	7741	8180	8656
10°	7496	9091	10371
15°	7131	10158	11823
20°	6708	11082	12677
25°	6249	11713	13105
30°	5845	12195	13313
35°	5576	12447	13539
40°	5391	12593	13715
45°	5400	12636	13721
50°	5486	12506	13333
55°	5734	12265	12104
60°	5848	11402	9830
65°	5922	9987	7221
70°	5665	7855	5608
75°	5084	5858	4729
80°	4314	4630	3784
85°	4187	3779	3149

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13721 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	0.9
10°-20°	165.8	2.8
20°-30°	275.5	4.7
30°-40°	347.6	5.9
40°-50°	371.6	6.3
50°-60°	327.9	5.6
60°-70°	210.5	3.6
70°-80°	93.3	1.6
80°-90°	25.9	0.4
90°-100°	97.4	1.7
100°-110°	652.4	11.1
110°-120°	883.3	15.1
120°-130°	718.3	12.3
130°-140°	576.4	9.8
140°-150°	454.2	7.8
150°-160°	332.1	5.7
160°-170°	206.3	3.5
170°-180°	70.3	1.2
0°-30°	491.3	8.4
0°-40°	838.9	14.3
0°-60°	1538.4	26.3
0°-90°	1868.1	31.9
90°-120°	1633.0	27.9
90°-150°	3382.0	57.7
90°-180°	3991.0	68.1
0°-180°	5858.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	487	487	487	487	487	
5°	478	492	505	522	534	45
15°	427	492	608	681	707	119
25°	351	476	658	719	736	161
35°	283	434	632	672	687	178
45°	236	372	553	588	601	183
55°	204	292	436	438	430	181
65°	155	196	261	212	189	152
75°	82	90	94	80	76	87
85°	23	19	20	18	17	24
90°	8	12	16	21	18	7
95°	50	77	43	46	54	51
105°	152	228	846	1077	712	161
115°	262	315	729	1510	1764	260
125°	371	421	688	1198	1415	330
135°	456	506	689	985	1131	351
145°	540	585	693	858	949	339
155°	633	656	707	778	814	291
165°	703	712	726	745	759	197
175°	740	744	740	735	731	70
180°	740	740	740	740	740	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	486.6	486.6	486.6	486.6	486.6
2.5°	483.0	490.1	490.2	493.0	496.6
5°	477.6	491.9	504.7	522.0	534.1
7.5°	466.2	491.9	532.8	572.8	592.8
10°	457.2	492.6	554.5	608.3	632.6
12.5°	445.4	492.3	576.2	640.9	668.8
15°	426.6	491.9	607.7	680.7	707.3
17.5°	404.9	489.9	632.4	705.6	728.8
20°	390.4	487.8	645.0	714.6	737.8
22.5°	374.1	483.0	652.3	719.1	740.6
25°	350.8	475.9	657.5	719.0	735.6
27.5°	328.0	465.6	657.7	709.9	724.0
30°	313.5	457.3	654.1	700.8	714.1
32.5°	300.8	448.2	646.9	690.0	704.1
35°	282.9	434.5	631.5	672.5	686.9
37.5°	267.5	418.9	612.0	652.0	668.8
40°	255.8	406.2	597.5	637.4	650.7
42.5°	246.7	392.8	580.3	619.3	630.8
45°	236.5	371.5	553.4	587.6	600.9
47.5°	225.7	349.6	522.4	554.7	563.3
50°	218.4	333.5	497.9	527.4	530.8
52.5°	213.9	316.6	474.4	493.0	493.6
55°	203.7	292.2	435.7	437.8	430.0
57.5°	190.1	263.8	386.6	375.5	356.9
60°	181.1	244.1	353.1	331.0	304.4
62.5°	172.0	225.3	317.8	282.0	251.0
65°	155.0	196.0	261.4	212.2	189.0
67.5°	135.3	163.7	205.3	158.8	143.3
70°	120.0	142.1	166.4	129.9	118.8
72.5°	105.5	120.5	134.7	107.4	101.6
75°	81.5	90.3	93.9	80.2	75.8
77.5°	60.0	60.4	65.2	56.5	54.3
80°	46.4	44.2	49.8	43.0	40.7
82.5°	35.5	32.4	36.2	31.2	29.9
85°	22.6	19.3	20.4	18.1	17.0
87.5°	13.4	11.6	12.3	12.3	10.9
90°	7.9	12.5	16.1	20.7	18.5
92.5°	21.8	23.7	26.4	33.9	35.3
95°	49.7	77.1	42.9	45.5	53.5
97.5°	77.2	140.3	278.0	83.0	70.9
100°	98.6	172.7	552.6	163.9	108.2
102.5°	120.0	198.6	746.2	427.9	233.9
105°	152.2	228.5	845.8	1077.2	712.1
107.5°	185.5	241.7	807.6	1567.3	1466.9
110°	206.9	260.4	785.3	1646.8	1768.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.3	282.8	762.9	1600.3	1805.8
115°	261.6	315.1	729.4	1510.1	1763.9
117.5°	295.8	348.7	721.0	1412.6	1673.6
120°	321.0	371.1	706.2	1338.4	1610.3
122.5°	339.6	392.4	686.6	1274.6	1524.7
125°	371.1	421.1	687.5	1197.5	1414.8
127.5°	396.9	448.8	687.3	1107.9	1322.7
130°	411.8	466.4	691.1	1047.2	1251.9
132.5°	428.6	483.2	689.2	1020.3	1188.6
135°	456.1	506.2	688.8	985.3	1130.9
137.5°	479.4	533.1	688.8	946.7	1071.4
140°	498.0	548.0	688.8	924.1	1037.8
142.5°	516.6	563.0	692.5	897.9	1004.3
145°	539.9	585.4	693.4	858.4	949.4
147.5°	567.8	607.8	699.0	830.0	900.1
150°	586.4	622.8	702.8	811.1	870.3
152.5°	605.0	637.8	702.8	796.0	844.2
155°	632.9	655.7	707.4	778.0	814.5
157.5°	655.3	677.1	713.0	766.7	793.0
160°	670.2	688.4	716.7	759.1	781.9
162.5°	681.3	699.6	720.4	755.2	770.7
165°	702.8	711.9	726.0	745.0	758.6
167.5°	714.9	723.0	730.7	740.2	748.4
170°	726.0	730.6	730.7	740.1	744.6
172.5°	729.8	737.9	734.4	736.4	740.9
175°	740.0	744.5	740.0	735.2	730.7
177.5°	740.0	743.6	740.0	739.9	736.3
180°	740.0	740.0	740.0	740.0	740.0

(END OF REPORT)