

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: P644968

Luminaire Tested: OMN4DIP-SR4F0-50D50U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644968
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-SR4F0-50D50U835-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

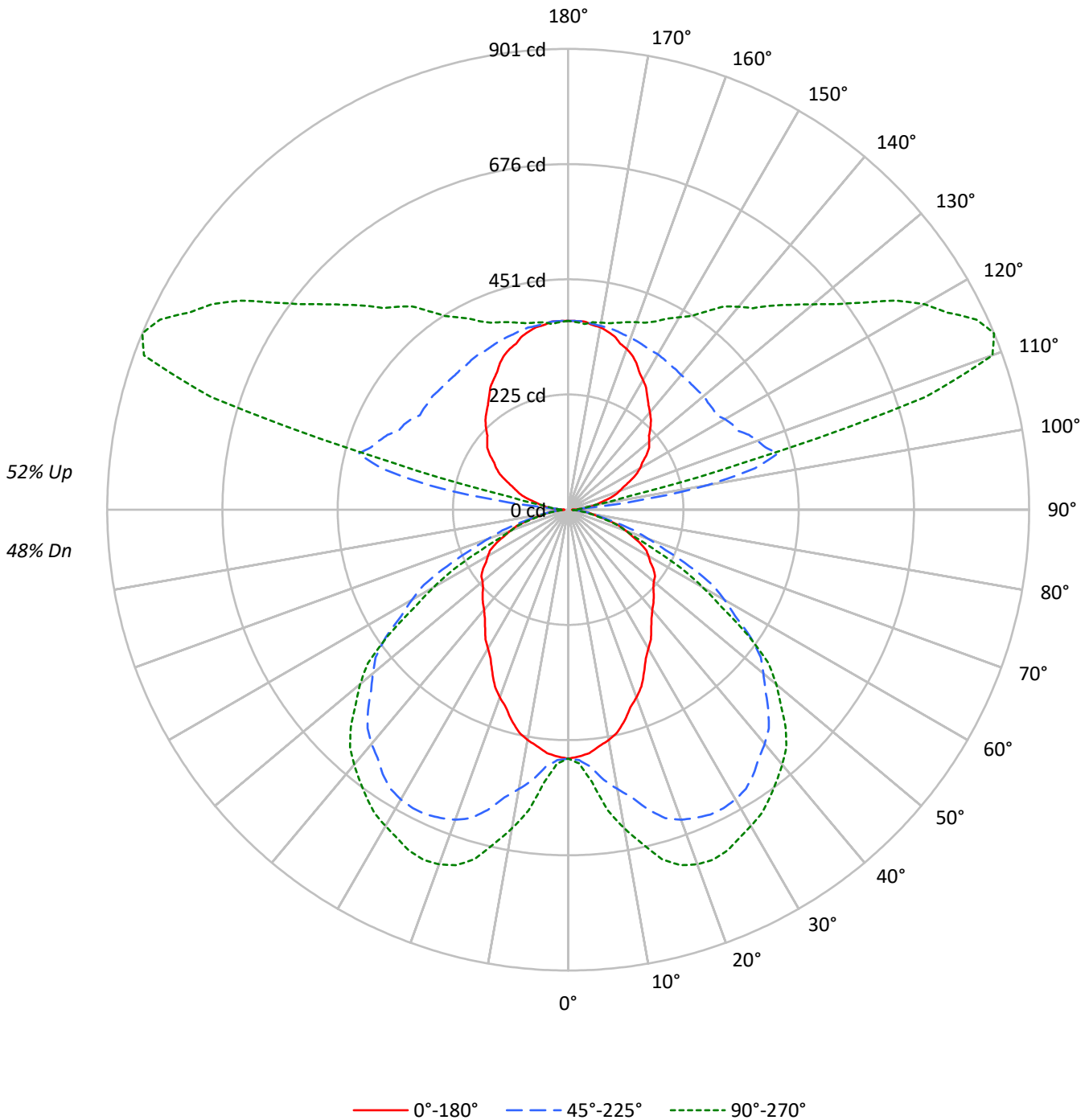
Lumens per Lamp: N/A
Luminaire Lumens: 3866.1 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.9
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										
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	50	30	10	0														
RCR																																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48						48														
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41						41														
2	89	81	75	70	81	75	70	65	63	60	56	53	50	47	43	41	39	34						34														
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	38	35	33	29						29														
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	31	28	25						25														
5	68	56	48	42	62	52	45	39	44	38	34	37	33	29	30	27	24	21						21														
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18						18														
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16						16														
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14						14														
9	49	37	30	25	45	35	28	23	30	24	20	25	21	18	21	17	15	13						13														
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	12						12														

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	1.3
10°-20°	165.8	4.3
20°-30°	275.5	7.1
30°-40°	347.6	9.0
40°-50°	371.6	9.6
50°-60°	327.9	8.5
60°-70°	210.5	5.4
70°-80°	93.3	2.4
80°-90°	25.0	0.6
90°-100°	51.8	1.3
100°-110°	327.5	8.5
110°-120°	442.2	11.4
120°-130°	359.4	9.3
130°-140°	287.7	7.4
140°-150°	226.6	5.9
150°-160°	165.7	4.3
160°-170°	102.9	2.7
170°-180°	35.1	0.9
0°-30°	491.3	12.7
0°-40°	838.9	21.7
0°-60°	1538.4	39.8
0°-90°	1867.2	48.3
90°-120°	821.5	21.2
90°-150°	1695.2	43.8
90°-180°	1999.0	51.7
0°-180°	3866.1	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	10	11	14	12	6
95°	31	42	24	24	28	30
105°	80	117	424	538	355	85
115°	133	160	366	754	880	133
125°	187	212	345	598	706	166
135°	228	252	344	492	564	175
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	

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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	11.2	11.3	10.9	9.5
90°	7.9	10.2	11.4	13.7	11.5
92.5°	16.2	15.8	16.1	19.4	19.0
95°	31.0	42.5	24.2	24.4	27.8
97.5°	44.1	73.9	140.8	42.5	36.0
100°	54.3	89.6	277.4	82.9	54.5
102.5°	64.5	102.5	374.0	214.2	116.8
105°	79.9	117.4	423.7	538.0	355.3
107.5°	96.4	123.5	404.6	782.5	731.9
110°	106.6	132.8	393.5	822.2	882.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	143.9	382.3	799.0	900.9
115°	133.4	159.5	365.6	754.0	880.0
117.5°	150.3	176.2	361.4	705.3	835.0
120°	162.4	187.4	354.0	668.3	803.4
122.5°	171.7	197.6	343.8	636.5	760.7
125°	186.8	211.8	344.7	598.0	705.9
127.5°	199.2	225.5	344.1	553.2	659.9
130°	206.6	233.8	345.9	522.4	624.6
132.5°	214.1	241.3	344.1	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2

(END OF REPORT)