

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: P644934

Luminaire Tested: OMN4DIP-SR4F0-50D25U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644934
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-SR4F0-50D25U830-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

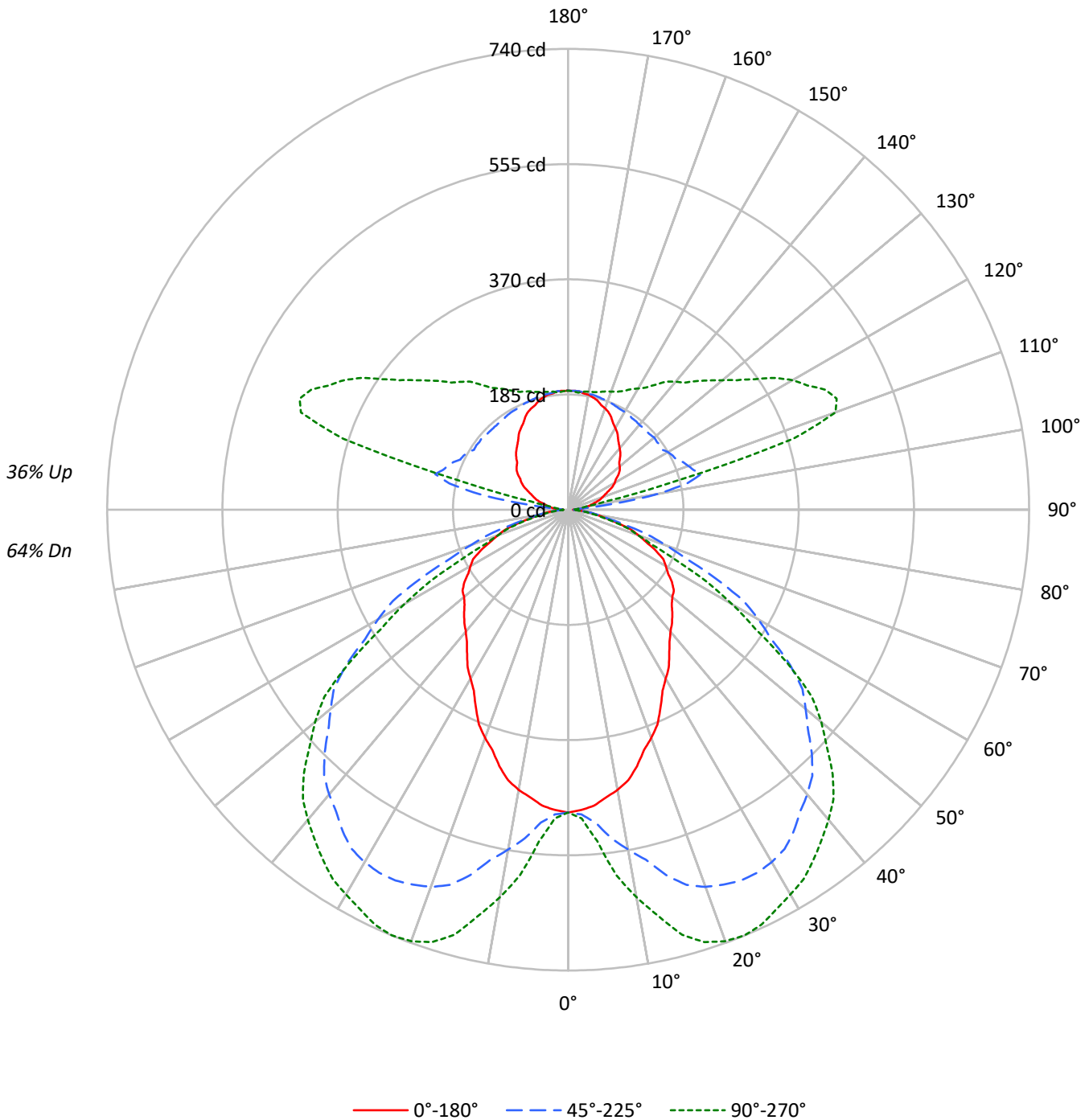
Lumens per Lamp: N/A
Luminaire Lumens: 2907.6 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 22.6
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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64				
1	101	97	93	89	95	91	88	85	80	78	75	70	69	67	61	60	59	54				
2	92	84	78	73	86	80	74	69	70	66	62	62	59	56	54	52	49	46				
3	84	74	67	61	78	70	63	58	62	57	52	55	50	47	48	45	42	38				
4	77	66	57	51	72	62	55	49	55	49	44	48	44	40	42	39	36	33				
5	70	58	50	44	66	55	47	42	49	43	38	43	38	35	38	34	31	28				
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24				
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24	21				
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	29	24	21	19				
9	52	39	31	26	48	37	30	25	33	27	23	30	25	21	26	22	19	17				
10	48	36	28	23	45	34	27	22	30	25	21	27	22	19	24	20	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7850	7850	7850
5°	7733	8173	8650
10°	7489	9083	10362
15°	7126	10150	11813
20°	6703	11074	12667
25°	6244	11703	13092
30°	5839	12184	13300
35°	5572	12435	13527
40°	5385	12583	13702
45°	5396	12625	13709
50°	5481	12496	13320
55°	5728	12253	12093
60°	5842	11393	9820
65°	5918	9979	7213
70°	5655	7846	5604
75°	5078	5852	4729
80°	4314	4621	3784
85°	4187	3779	3149

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13709 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	1.7
10°-20°	165.7	5.7
20°-30°	275.3	9.5
30°-40°	347.3	11.9
40°-50°	371.2	12.8
50°-60°	327.7	11.3
60°-70°	210.3	7.2
70°-80°	93.3	3.2
80°-90°	24.6	0.8
90°-100°	29.9	1.0
100°-110°	171.5	5.9
110°-120°	230.4	7.9
120°-130°	187.0	6.4
130°-140°	149.0	5.1
140°-150°	117.3	4.0
150°-160°	85.8	3.0
160°-170°	53.3	1.8
170°-180°	18.2	0.6
0°-30°	490.8	16.9
0°-40°	838.1	28.8
0°-60°	1537.0	52.9
0°-90°	1865.1	64.1
90°-120°	431.8	14.9
90°-150°	885.2	30.4
90°-180°	1042.0	35.8
0°-180°	2907.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	477	492	504	522	534	45
15°	426	492	607	680	707	119
25°	350	475	657	718	735	161
35°	283	434	631	672	686	177
45°	236	371	553	587	600	183
55°	204	292	435	437	430	181
65°	155	196	261	212	189	152
75°	81	90	94	80	76	87
85°	23	19	20	18	17	24
90°	8	9	9	10	8	6
95°	22	26	15	14	16	20
105°	45	64	221	279	184	48
115°	72	85	191	391	456	71
125°	98	111	180	310	365	87
135°	118	131	178	254	292	91
145°	139	151	179	222	245	88
155°	164	169	183	201	210	75
165°	182	184	188	192	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	486.2	486.2	486.2	486.2	486.2
2.5°	482.6	489.6	489.8	492.6	496.1
5°	477.1	491.5	504.3	521.5	533.7
7.5°	465.8	491.5	532.3	572.3	592.2
10°	456.8	492.2	554.0	607.7	632.0
12.5°	445.0	491.9	575.7	640.4	668.2
15°	426.3	491.5	607.2	680.1	706.7
17.5°	404.5	489.4	631.8	704.9	728.1
20°	390.1	487.4	644.5	714.0	737.2
22.5°	373.8	482.6	651.7	718.4	739.9
25°	350.5	475.4	656.9	718.3	734.9
27.5°	327.7	465.2	657.1	709.2	723.4
30°	313.2	456.9	653.5	700.2	713.4
32.5°	300.5	447.8	646.3	689.3	703.5
35°	282.7	434.1	630.9	671.9	686.3
37.5°	267.3	418.5	611.5	651.4	668.2
40°	255.5	405.9	597.0	636.9	650.1
42.5°	246.5	392.4	579.8	618.7	630.2
45°	236.3	371.2	552.9	587.1	600.4
47.5°	225.5	349.3	521.9	554.2	562.8
50°	218.2	333.2	497.5	527.0	530.3
52.5°	213.7	316.3	474.0	492.5	493.2
55°	203.5	292.0	435.3	437.4	429.6
57.5°	189.9	263.6	386.2	375.2	356.6
60°	180.9	243.9	352.8	330.7	304.1
62.5°	171.9	225.1	317.5	281.7	250.8
65°	154.9	195.8	261.2	212.0	188.8
67.5°	135.2	163.5	205.1	158.6	143.1
70°	119.8	142.0	166.2	129.8	118.7
72.5°	105.4	120.4	134.5	107.3	101.5
75°	81.4	90.3	93.8	80.2	75.8
77.5°	59.9	60.4	65.1	56.5	54.3
80°	46.4	44.1	49.7	42.9	40.7
82.5°	35.5	32.4	36.2	31.2	29.8
85°	22.6	19.3	20.4	18.1	17.0
87.5°	13.3	10.9	10.9	10.2	8.9
90°	7.9	9.1	9.2	10.3	8.1
92.5°	13.5	12.0	11.2	12.4	11.1
95°	22.1	25.9	15.3	14.2	15.5
97.5°	28.1	42.0	75.0	23.1	19.2
100°	33.0	49.7	145.2	44.0	28.8
102.5°	37.9	56.4	195.2	111.5	60.6
105°	45.2	64.1	221.0	279.1	183.9
107.5°	53.6	66.7	211.1	405.6	378.9
110°	58.5	71.5	205.3	426.2	456.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	64.2	77.2	199.6	414.2	466.4
115°	71.8	84.8	190.9	390.9	455.6
117.5°	80.4	93.4	188.8	365.7	432.3
120°	86.3	99.2	184.9	346.5	415.9
122.5°	91.1	104.1	179.2	330.0	393.8
125°	98.4	111.3	180.1	310.1	365.4
127.5°	104.2	118.2	179.2	286.8	341.6
130°	108.0	122.1	180.2	270.5	323.4
132.5°	111.0	125.1	178.4	263.5	307.0
135°	117.8	130.7	177.9	254.5	292.1
137.5°	123.8	137.7	177.9	244.5	276.7
140°	128.6	141.6	177.9	238.7	268.1
142.5°	133.4	145.4	178.9	231.9	259.4
145°	139.4	151.2	179.1	221.7	245.2
147.5°	146.7	157.0	180.6	214.4	232.5
150°	151.5	160.9	181.5	209.5	224.8
152.5°	156.3	164.7	181.5	205.6	218.1
155°	163.5	169.4	182.7	201.0	210.4
157.5°	169.3	174.9	184.2	198.0	204.8
160°	173.1	177.8	185.1	196.1	201.9
162.5°	176.0	180.7	186.1	195.1	199.1
165°	181.5	183.9	187.5	192.4	195.9
167.5°	184.6	186.8	188.7	191.2	193.3
170°	187.5	188.7	188.7	191.2	192.3
172.5°	188.5	190.6	189.7	190.2	191.4
175°	191.1	192.3	191.1	189.9	188.7
177.5°	191.1	192.1	191.1	191.1	190.2
180°	191.1	191.1	191.1	191.1	191.1

(END OF REPORT)