

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: P644878

Luminaire Tested: OMN4DIP-SR4F0-50D125U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644878
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-SR4F0-50D125U835-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

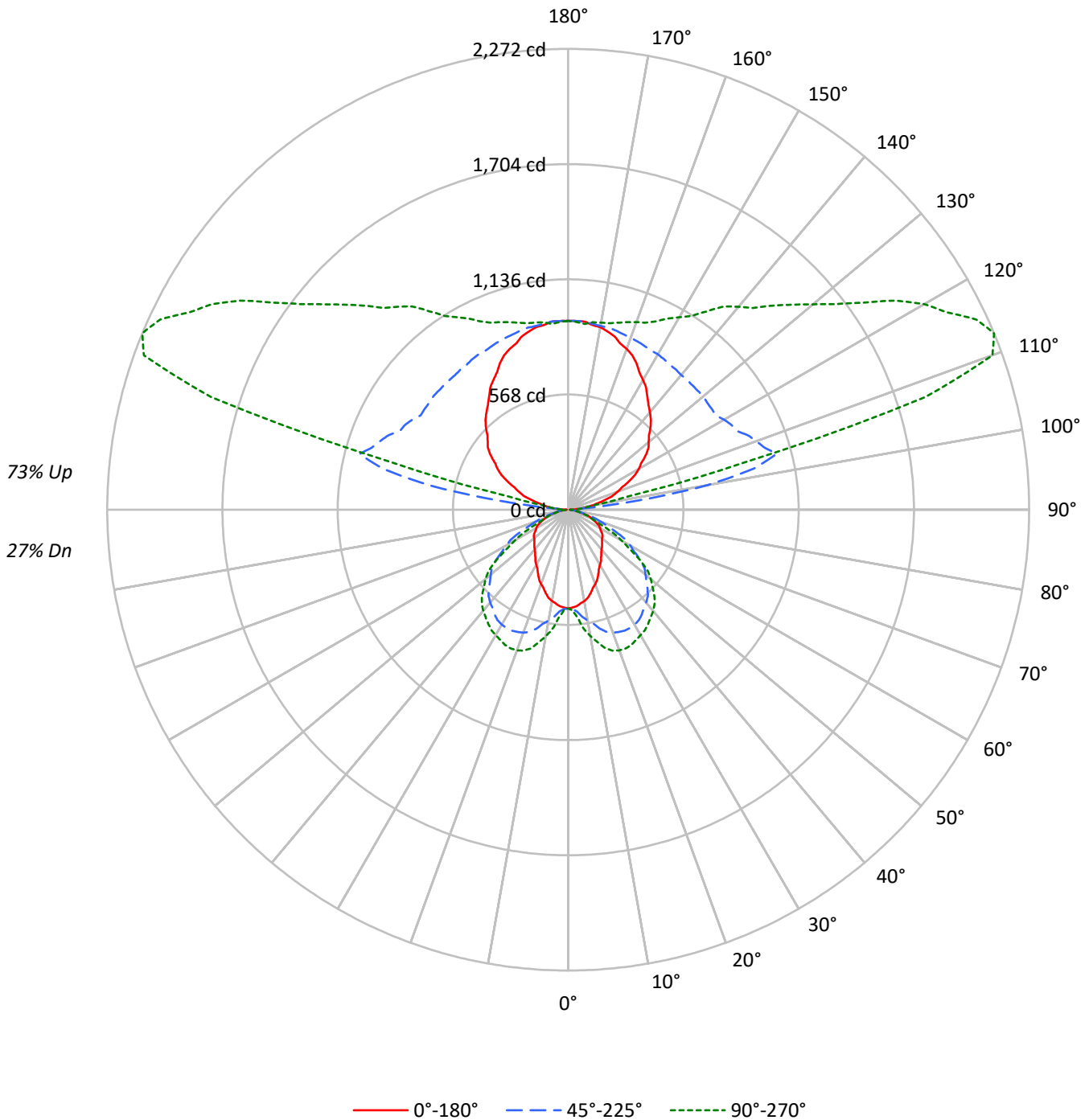
Lumens per Lamp: N/A
Luminaire Lumens: 6885.6 lumens
Efficiency: N/A
Efficacy: 131.2 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 52.5
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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27				
1	93	89	85	81	83	79	76	73	62	60	58	46	45	43	31	30	30	23				
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25	19				
3	77	68	61	55	68	61	55	50	48	43	40	35	33	30	24	23	21	16				
4	70	60	52	46	62	54	47	42	42	38	34	31	28	26	21	20	18	14				
5	64	53	45	39	57	48	41	36	38	33	29	28	25	22	19	17	16	12				
6	59	47	40	34	52	43	36	31	34	29	25	25	22	19	17	15	14	10				
7	54	43	35	29	48	38	32	27	30	25	22	23	19	17	16	14	12	9				
8	50	38	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8				
9	47	35	28	23	42	31	25	21	25	20	17	19	16	13	13	11	10	7				
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	9	6				

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	0.7
10°-20°	165.8	2.4
20°-30°	275.5	4.0
30°-40°	347.6	5.0
40°-50°	371.6	5.4
50°-60°	327.9	4.8
60°-70°	210.5	3.1
70°-80°	93.3	1.4
80°-90°	26.3	0.4
90°-100°	120.8	1.8
100°-110°	819.8	11.9
110°-120°	1110.5	16.1
120°-130°	903.3	13.1
130°-140°	725.1	10.5
140°-150°	571.5	8.3
150°-160°	417.9	6.1
160°-170°	259.6	3.8
170°-180°	88.5	1.3
0°-30°	491.3	7.1
0°-40°	838.9	12.2
0°-60°	1538.4	22.3
0°-90°	1868.5	27.1
90°-120°	2051.1	29.8
90°-150°	4251.1	61.7
90°-180°	5017.0	72.9
0°-180°	6885.6	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	14	18	24	22	7
95°	59	95	52	56	67	62
105°	189	286	1063	1355	896	200
115°	328	395	917	1900	2219	326
125°	466	529	864	1506	1780	414
135°	574	637	867	1240	1423	442
145°	679	736	872	1080	1195	427
155°	796	825	890	979	1025	366
165°	884	896	914	937	954	248
175°	931	937	931	925	919	88
180°	931	931	931	931	931	

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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	11.8	12.8	13.0	11.7
90°	7.9	13.6	18.5	24.3	22.1
92.5°	24.7	27.8	31.6	41.3	43.7
95°	59.3	94.9	52.5	56.3	66.7
97.5°	94.2	174.5	348.6	103.8	89.0
100°	121.4	215.5	694.4	205.6	135.8
102.5°	148.6	248.1	938.0	538.1	294.2
105°	189.4	285.7	1063.3	1355.1	895.9
107.5°	231.4	302.7	1015.3	1971.6	1845.7
110°	258.6	326.2	987.2	2071.7	2225.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.7	354.3	959.0	2013.2	2272.0
115°	327.7	395.3	916.9	1899.8	2219.3
117.5°	370.8	437.5	906.3	1777.0	2105.7
120°	402.7	465.7	887.6	1683.6	2026.1
122.5°	426.1	492.8	863.3	1603.4	1918.3
125°	466.0	529.0	864.2	1506.4	1780.1
127.5°	498.8	563.8	864.2	1393.7	1664.2
130°	517.6	586.3	868.9	1317.5	1575.2
132.5°	539.2	607.9	867.1	1283.7	1495.5
135°	573.9	636.8	866.6	1239.7	1422.9
137.5°	603.1	670.7	866.6	1191.1	1348.0
140°	626.6	689.5	866.6	1162.7	1305.8
142.5°	650.0	708.4	871.3	1129.7	1263.7
145°	679.3	736.5	872.5	1080.1	1194.6
147.5°	714.4	764.8	879.5	1044.3	1132.5
150°	737.8	783.6	884.2	1020.6	1095.0
152.5°	761.2	802.5	884.2	1001.5	1062.2
155°	796.4	825.0	890.1	978.9	1024.7
157.5°	824.5	852.0	897.1	964.6	997.8
160°	843.2	866.1	901.8	955.1	983.8
162.5°	857.3	880.2	906.5	950.2	969.7
165°	884.2	895.7	913.5	937.3	954.5
167.5°	899.4	909.7	919.3	931.3	941.6
170°	913.5	919.2	919.3	931.2	936.9
172.5°	918.2	928.5	924.0	926.5	932.2
175°	931.1	936.8	931.1	925.1	919.3
177.5°	931.1	935.6	931.1	931.0	926.4
180°	931.1	931.1	931.1	931.1	931.1

(END OF REPORT)