

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: P644527

Luminaire Tested: OMN4DIP-SR4F0-100D125U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644527
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-SR4F0-100D125U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

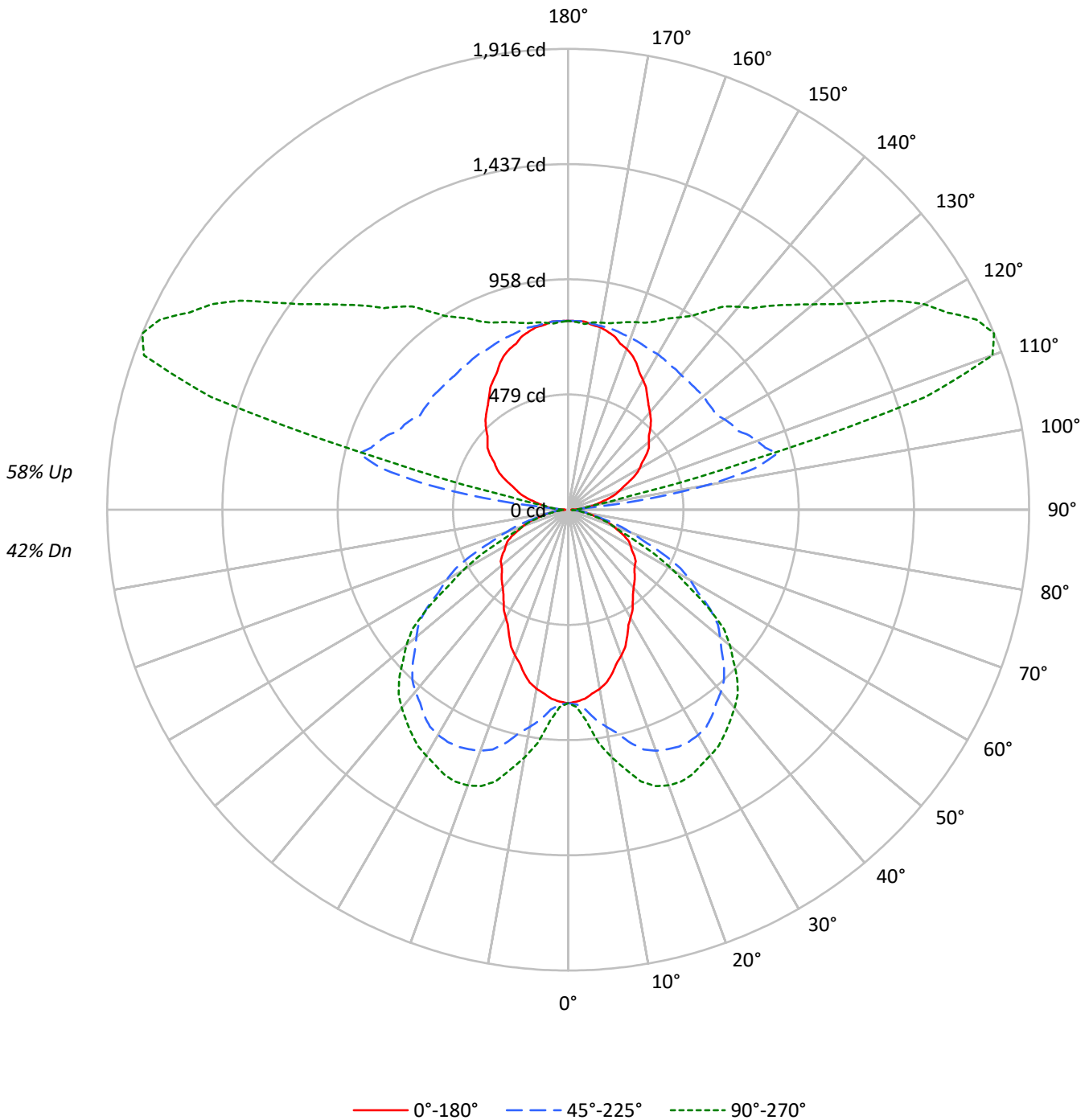
Lumens per Lamp: N/A
Luminaire Lumens: 7330.1 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.1
Input Voltage (V): 120
Input Current (A_{in}): 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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42																				
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	36																				
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30																				
3	80	70	63	57	72	65	58	53	53	49	45	43	40	37	34	31	30	25																				
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25	21																				
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	18																				
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16																				
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14																				
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	12																				
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	16	13	11																				
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12988	12988	12988
5°	12794	13522	14311
10°	12391	15028	17144
15°	11789	16792	19544
20°	11089	18321	20957
25°	10331	19363	21663
30°	9661	20159	22007
35°	9219	20576	22381
40°	8911	20818	22672
45°	8928	20888	22681
50°	9068	20675	22039
55°	9478	20273	20011
60°	9665	18849	16249
65°	9792	16508	11935
70°	9361	12982	9272
75°	8403	9688	7817
80°	7132	7652	6258
85°	6928	6243	5206

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 22681 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	1.1
10°-20°	274.2	3.7
20°-30°	455.5	6.2
30°-40°	574.6	7.8
40°-50°	614.2	8.4
50°-60°	542.1	7.4
60°-70°	347.9	4.7
70°-80°	154.3	2.1
80°-90°	41.8	0.6
90°-100°	107.0	1.5
100°-110°	694.5	9.5
110°-120°	938.9	12.8
120°-130°	763.3	10.4
130°-140°	611.6	8.3
140°-150°	481.9	6.6
150°-160°	352.4	4.8
160°-170°	218.9	3.0
170°-180°	74.6	1.0
0°-30°	812.1	11.1
0°-40°	1386.7	18.9
0°-60°	2543.1	34.7
0°-90°	3087.0	42.1
90°-120°	1740.4	23.7
90°-150°	3597.2	49.1
90°-180°	4243.0	57.9
0°-180°	7330.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	789	813	834	863	883	74
15°	705	813	1005	1125	1169	198
25°	580	787	1087	1188	1216	267
35°	468	718	1044	1112	1136	294
45°	391	614	915	971	993	302
55°	337	483	720	724	711	299
65°	256	324	432	351	312	251
75°	135	149	155	133	125	144
85°	37	32	34	30	28	40
90°	13	18	21	26	22	11
95°	60	87	49	50	58	59
105°	166	246	899	1144	755	176
115°	281	337	776	1603	1871	279
125°	396	449	731	1271	1501	352
135°	484	537	731	1045	1200	373
145°	573	621	736	911	1007	360
155°	672	696	750	825	864	308
165°	746	755	770	790	805	209
175°	785	790	785	780	775	74
180°	785	785	785	785	785	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	804.4	804.4	804.4	804.4	804.4
2.5°	798.4	810.1	810.4	815.0	820.9
5°	789.4	813.2	834.3	862.9	883.0
7.5°	770.7	813.2	880.7	947.0	979.9
10°	755.8	814.3	916.6	1005.5	1045.7
12.5°	736.3	813.9	952.6	1059.5	1105.6
15°	705.3	813.2	1004.6	1125.3	1169.2
17.5°	669.3	809.8	1045.4	1166.3	1204.7
20°	645.4	806.4	1066.3	1181.3	1219.7
22.5°	618.5	798.4	1078.3	1188.7	1224.2
25°	579.9	786.6	1086.9	1188.5	1216.0
27.5°	542.1	769.7	1087.3	1173.5	1196.9
30°	518.2	756.0	1081.3	1158.5	1180.4
32.5°	497.2	740.9	1069.3	1140.5	1164.0
35°	467.7	718.3	1043.9	1111.7	1135.5
37.5°	442.2	692.5	1011.7	1077.8	1105.6
40°	422.8	671.5	987.7	1053.7	1075.7
42.5°	407.8	649.3	959.3	1023.7	1042.7
45°	391.0	614.1	914.8	971.4	993.3
47.5°	373.0	577.9	863.5	917.0	931.2
50°	361.0	551.3	823.1	871.9	877.4
52.5°	353.6	523.3	784.2	814.9	816.0
55°	336.7	483.1	720.2	723.7	710.9
57.5°	314.3	436.1	639.0	620.8	590.0
60°	299.3	403.6	583.7	547.1	503.2
62.5°	284.3	372.5	525.3	466.1	414.9
65°	256.3	324.0	432.1	350.8	312.4
67.5°	223.7	270.6	339.3	262.4	236.8
70°	198.3	234.9	275.0	214.7	196.4
72.5°	174.3	199.2	222.6	177.5	168.0
75°	134.7	149.3	155.3	132.7	125.3
77.5°	99.1	99.9	107.8	93.5	89.8
80°	76.7	73.0	82.3	71.0	67.3
82.5°	58.7	53.6	59.9	51.6	49.4
85°	37.4	31.9	33.7	29.9	28.1
87.5°	22.1	18.6	19.2	18.6	16.4
90°	13.1	17.9	21.1	26.0	22.3
92.5°	29.4	29.9	31.5	38.8	39.1
95°	60.1	86.6	48.9	50.2	58.1
97.5°	88.4	153.4	297.4	89.3	75.9
100°	110.6	187.2	588.2	175.2	115.4
102.5°	132.9	214.8	793.6	454.8	248.2
105°	166.2	246.4	899.3	1143.5	755.4
107.5°	201.3	259.8	858.8	1663.4	1556.3
110°	223.5	279.6	835.1	1747.7	1876.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	247.2	303.3	811.4	1698.4	1915.7
115°	280.9	337.0	775.9	1602.8	1871.3
117.5°	317.1	372.6	767.0	1499.3	1775.5
120°	343.2	396.3	751.2	1420.5	1708.4
122.5°	363.0	418.5	729.9	1352.9	1617.5
125°	395.7	448.8	731.4	1271.1	1501.0
127.5°	422.4	478.0	730.5	1175.9	1403.2
130°	438.2	496.2	734.5	1110.9	1328.2
132.5°	455.0	512.9	731.5	1082.4	1261.0
135°	483.9	537.0	730.7	1045.3	1199.8
137.5°	508.6	565.5	730.7	1004.3	1136.6
140°	528.3	581.4	730.7	980.4	1101.1
142.5°	548.1	597.3	734.7	952.5	1065.5
145°	572.7	621.0	735.7	910.7	1007.2
147.5°	602.4	644.9	741.6	880.6	954.9
150°	622.1	660.7	745.6	860.5	923.3
152.5°	641.9	676.6	745.6	844.5	895.7
155°	671.5	695.6	750.5	825.4	864.1
157.5°	695.2	718.4	756.4	813.3	841.3
160°	711.0	730.3	760.4	805.4	829.5
162.5°	722.8	742.2	764.3	801.2	817.6
165°	745.6	755.2	770.2	790.3	804.8
167.5°	758.4	767.1	775.2	785.3	793.9
170°	770.2	775.1	775.2	785.2	790.0
172.5°	774.2	782.9	779.1	781.2	786.0
175°	785.1	789.9	785.1	780.0	775.2
177.5°	785.1	788.9	785.1	785.0	781.1
180°	785.1	785.1	785.1	785.1	785.1

(END OF REPORT)