

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: P644876

Luminaire Tested: OMN4DIP-SR4F0-50D125U830-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644876
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-50D125U830-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

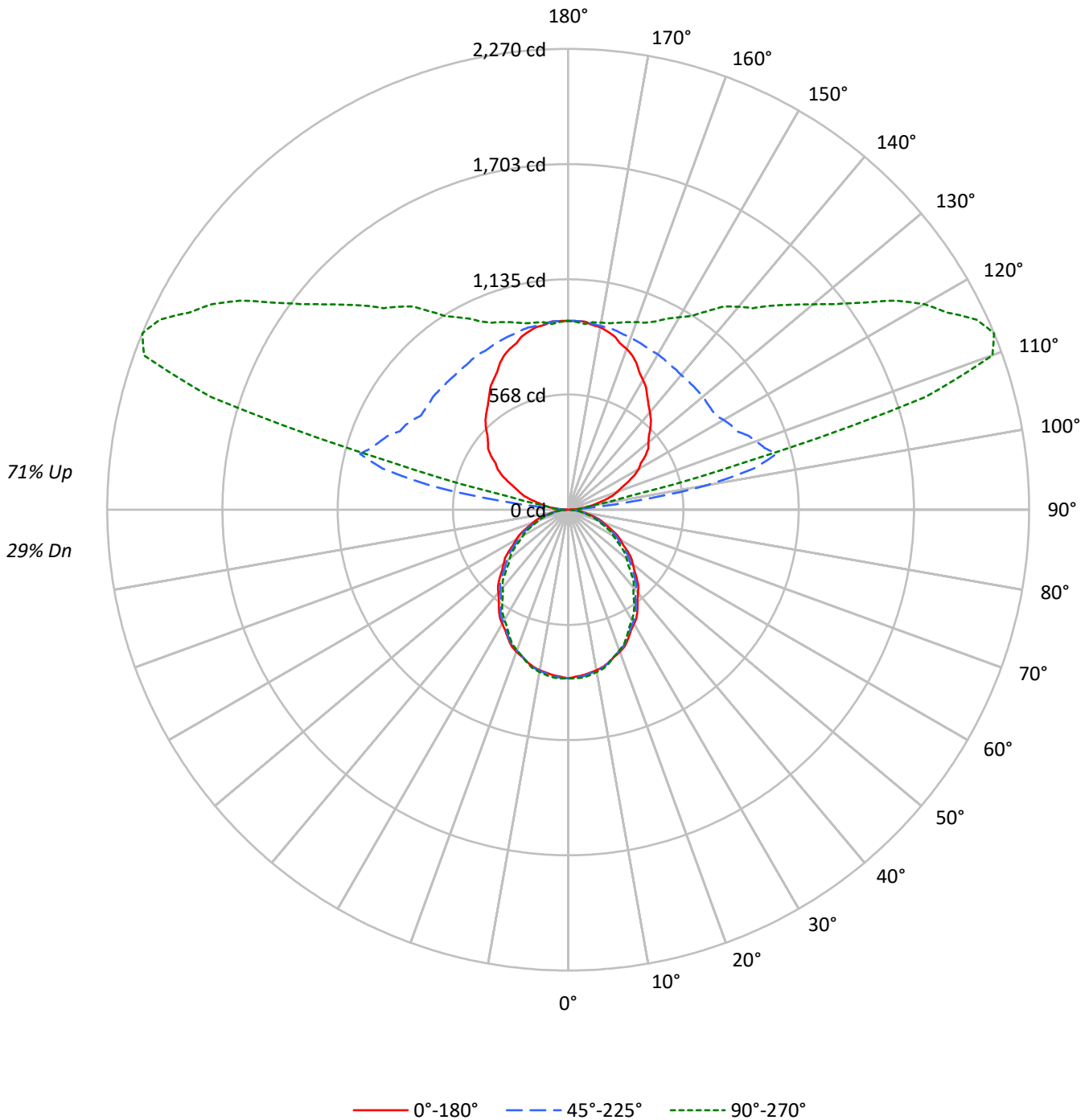
Lumens per Lamp: N/A
Luminaire Lumens: 7026.0 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 52.5
Input Voltage (V): 120
Input Current (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

TEST NUMBER: P644876

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U830-FLLOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644876

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U830-FLLOOB-1DUDD-WW

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	72	72	72	53	53	53	37	37	37	29				
1	93	89	85	82	83	80	77	74	63	60	59	47	46	44	32	32	31	24				
2	85	78	72	67	76	70	65	61	55	51	49	41	39	37	29	27	26	20				
3	77	68	61	56	69	61	55	51	48	44	41	36	34	31	25	24	22	17				
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	23	21	19	15				
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17	13				
6	60	48	40	35	53	43	37	32	34	30	26	26	23	20	19	16	15	11				
7	55	43	36	30	49	39	32	28	31	26	23	24	20	18	17	15	13	10				
8	51	39	32	27	46	35	29	24	28	24	20	22	18	16	16	13	12	9				
9	47	36	28	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8				
10	44	33	26	21	40	30	23	19	24	19	16	18	15	13	13	11	10	8				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13417	13417	13417
5°	13267	13358	13451
10°	13162	13218	13309
15°	12985	12985	13060
20°	12802	12704	12667
25°	12469	12367	12207
30°	12100	11930	11699
35°	11722	11432	11166
40°	11272	10939	10557
45°	10894	10481	9965
50°	10422	9970	9457
55°	10027	9517	8943
60°	9565	9055	8289
65°	9070	8424	7775
70°	8592	7794	7260
75°	8041	7124	6769
80°	7355	6518	6202
85°	6910	6076	5650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10894 cd/sqm



TEST NUMBER: P644876

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U830-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	1.1
10°-20°	219.4	3.1
20°-30°	319.0	4.5
30°-40°	362.8	5.2
40°-50°	353.8	5.0
50°-60°	302.0	4.3
60°-70°	219.4	3.1
70°-80°	124.1	1.8
80°-90°	40.3	0.6
90°-100°	119.2	1.7
100°-110°	817.7	11.6
110°-120°	1108.1	15.8
120°-130°	901.5	12.8
130°-140°	724.4	10.3
140°-150°	571.0	8.1
150°-160°	417.5	5.9
160°-170°	259.3	3.7
170°-180°	88.4	1.3
0°-30°	616.5	8.8
0°-40°	979.3	13.9
0°-60°	1635.1	23.3
0°-90°	2018.9	28.7
90°-120°	2044.9	29.1
90°-150°	4241.8	60.4
90°-180°	5007.0	71.3
0°-180°	7026.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	831	831	831	831	831	
5°	819	831	824	823	830	78
15°	777	787	777	776	781	219
25°	700	706	694	682	685	322
35°	595	597	580	566	566	371
45°	477	475	459	443	436	367
55°	356	355	338	322	318	318
65°	237	235	220	207	204	236
75°	129	124	114	110	108	137
85°	37	33	33	32	30	40
90°	4	11	18	23	23	7
95°	56	92	50	56	67	59
105°	187	282	1061	1354	895	198
115°	325	393	914	1897	2217	323
125°	464	527	861	1504	1778	412
135°	573	636	866	1239	1422	441
145°	679	736	872	1079	1194	426
155°	796	824	889	978	1024	365
165°	883	895	913	936	954	248
175°	930	936	930	924	918	88
180°	930	930	930	930	930	



TEST NUMBER: P644876

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U830-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	831.0	831.0	831.0	831.0	831.0
2.5°	823.8	834.4	828.3	828.4	831.9
5°	818.6	830.7	824.2	823.3	829.9
7.5°	810.0	821.9	814.3	813.1	821.8
10°	802.8	813.8	806.2	804.1	811.8
12.5°	792.8	803.9	796.2	793.2	800.9
15°	776.8	786.7	776.8	775.7	781.3
17.5°	758.7	767.3	755.7	752.0	756.2
20°	745.1	752.8	739.4	733.9	737.2
22.5°	727.9	735.6	721.4	713.1	717.3
25°	699.9	706.5	694.2	681.9	685.2
27.5°	669.8	674.9	662.6	649.9	651.0
30°	649.0	652.3	639.9	626.4	627.5
32.5°	627.3	629.7	616.4	602.0	602.2
35°	594.7	596.9	580.0	566.5	566.5
37.5°	560.1	561.4	543.4	528.7	527.1
40°	534.8	537.0	519.0	504.2	500.9
42.5°	511.3	511.7	495.4	480.7	476.5
45°	477.1	474.9	459.0	443.1	436.4
47.5°	440.3	440.3	422.2	406.2	400.0
50°	414.9	414.9	396.9	380.9	376.5
52.5°	391.4	390.5	373.3	357.4	351.2
55°	356.2	355.0	338.1	322.1	317.7
57.5°	318.8	318.8	303.0	285.9	281.1
60°	296.2	296.2	280.4	263.3	256.7
62.5°	271.8	270.9	255.1	239.8	235.9
65°	237.4	235.2	220.5	206.8	203.5
67.5°	204.6	202.4	186.8	175.9	173.7
70°	182.0	179.8	165.1	156.0	153.8
72.5°	160.3	157.2	144.3	137.0	134.8
75°	128.9	124.5	114.2	109.6	108.5
77.5°	99.0	91.5	87.3	84.1	83.0
80°	79.1	72.5	70.1	67.8	66.7
82.5°	62.0	55.3	54.7	53.3	52.2
85°	37.3	32.9	32.8	31.6	30.5
87.5°	16.3	15.0	16.4	17.3	17.3
90°	4.5	11.3	18.5	23.2	23.2
92.5°	22.2	25.5	30.7	41.1	44.8
95°	55.8	91.5	50.2	56.3	66.6
97.5°	91.0	171.2	347.2	103.5	88.9
100°	119.1	213.0	692.6	204.3	135.7
102.5°	146.2	244.8	936.0	537.3	293.9
105°	187.0	282.1	1061.2	1353.9	895.1
107.5°	228.9	300.1	1013.2	1969.9	1844.0
110°	256.1	323.6	985.1	2069.8	2223.2



TEST NUMBER: P644876

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U830-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.2	351.7	957.0	2011.4	2270.0
115°	325.2	392.7	913.8	1897.0	2217.3
117.5°	368.5	434.9	903.3	1774.3	2103.8
120°	401.2	463.0	884.5	1681.0	2024.2
122.5°	423.7	491.0	861.1	1600.8	1916.6
125°	464.4	527.4	861.1	1503.9	1778.5
127.5°	497.2	562.2	862.3	1391.5	1662.7
130°	516.0	584.6	867.0	1316.3	1573.8
132.5°	538.5	607.1	866.1	1282.5	1494.2
135°	573.3	636.3	865.9	1238.6	1421.7
137.5°	602.6	670.1	865.9	1190.0	1346.8
140°	626.0	688.9	865.9	1161.6	1304.6
142.5°	649.4	707.7	870.5	1128.7	1262.5
145°	678.6	735.9	871.7	1079.1	1193.5
147.5°	713.8	764.1	878.7	1043.4	1131.5
150°	737.2	782.9	883.4	1019.7	1094.0
152.5°	760.6	801.7	883.4	1000.6	1061.3
155°	795.7	824.3	889.3	978.1	1023.8
157.5°	823.7	851.2	896.3	963.7	996.9
160°	842.5	865.3	901.0	954.3	982.9
162.5°	856.5	879.4	905.6	949.4	968.8
165°	883.4	894.9	912.7	936.5	953.6
167.5°	898.6	908.9	918.5	930.4	940.7
170°	912.7	918.4	918.5	930.3	936.1
172.5°	917.3	927.6	923.2	925.7	931.4
175°	930.2	935.9	930.2	924.2	918.5
177.5°	930.2	934.8	930.2	930.1	925.5
180°	930.2	930.2	930.2	930.2	930.2

(END OF REPORT)