

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: P644889

Luminaire Tested: OMN4DIP-SR4F0-50D125U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644889
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-SR4F0-50D125U930-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

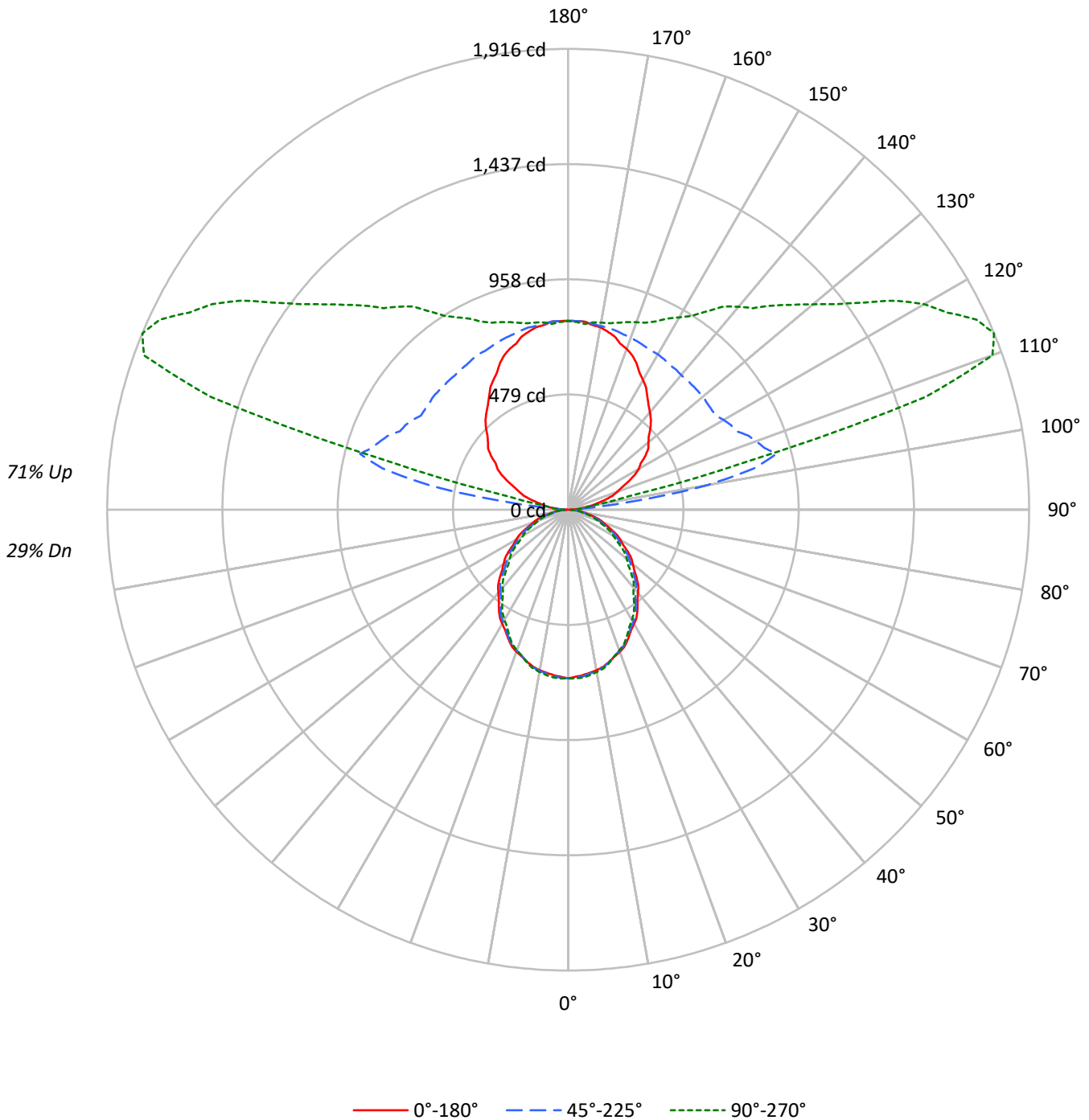
Lumens per Lamp: N/A
Luminaire Lumens: 5929.6 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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

TEST NUMBER: P644889

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U930-FLLOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644889

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U930-FLLOOB-1DUDD-WW

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	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°	11323	11323	11323
5°	11196	11274	11352
10°	11108	11155	11232
15°	10957	10957	11022
20°	10804	10723	10689
25°	10523	10438	10302
30°	10211	10069	9874
35°	9893	9648	9424
40°	9512	9232	8909
45°	9195	8846	8410
50°	8796	8412	7983
55°	8462	8031	7547
60°	8073	7640	6994
65°	7656	7110	6564
70°	7251	6576	6128
75°	6787	6014	5714
80°	6211	5504	5235
85°	5835	5132	4780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9195 cd/sqm



TEST NUMBER: P644889

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U930-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	1.1
10°-20°	185.1	3.1
20°-30°	269.2	4.5
30°-40°	306.2	5.2
40°-50°	298.6	5.0
50°-60°	254.8	4.3
60°-70°	185.2	3.1
70°-80°	104.7	1.8
80°-90°	34.0	0.6
90°-100°	100.6	1.7
100°-110°	690.1	11.6
110°-120°	935.1	15.8
120°-130°	760.8	12.8
130°-140°	611.3	10.3
140°-150°	481.9	8.1
150°-160°	352.4	5.9
160°-170°	218.9	3.7
170°-180°	74.6	1.3
0°-30°	520.3	8.8
0°-40°	826.5	13.9
0°-60°	1379.9	23.3
0°-90°	1703.9	28.7
90°-120°	1725.8	29.1
90°-150°	3579.9	60.4
90°-180°	4226.0	71.3
0°-180°	5929.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	691	701	696	695	700	65
15°	656	664	656	655	659	185
25°	591	596	586	576	578	272
35°	502	504	490	478	478	313
45°	403	401	387	374	368	310
55°	301	300	285	272	268	268
65°	200	198	186	175	172	199
75°	109	105	96	92	92	115
85°	32	28	28	27	26	34
90°	4	10	16	20	20	5
95°	47	77	42	48	56	50
105°	158	238	896	1143	755	167
115°	274	331	771	1601	1871	273
125°	392	445	727	1269	1501	348
135°	484	537	731	1045	1200	372
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	



TEST NUMBER: P644889

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U930-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	701.3	701.3	701.3	701.3	701.3
2.5°	695.2	704.2	699.1	699.1	702.1
5°	690.8	701.1	695.6	694.8	700.4
7.5°	683.6	693.7	687.2	686.2	693.5
10°	677.5	686.8	680.4	678.6	685.1
12.5°	669.1	678.4	672.0	669.4	676.0
15°	655.5	663.9	655.5	654.7	659.4
17.5°	640.3	647.6	637.8	634.6	638.2
20°	628.8	635.4	624.1	619.3	622.1
22.5°	614.3	620.9	608.8	601.8	605.4
25°	590.7	596.3	585.9	575.5	578.3
27.5°	565.3	569.6	559.2	548.5	549.4
30°	547.7	550.5	540.1	528.7	529.6
32.5°	529.4	531.4	520.2	508.0	508.2
35°	501.9	503.8	489.5	478.1	478.1
37.5°	472.7	473.8	458.6	446.2	444.9
40°	451.3	453.2	438.0	425.5	422.7
42.5°	431.5	431.9	418.1	405.6	402.1
45°	402.7	400.8	387.4	373.9	368.3
47.5°	371.6	371.6	356.3	342.8	337.6
50°	350.2	350.2	334.9	321.5	317.8
52.5°	330.3	329.6	315.1	301.6	296.4
55°	300.6	299.6	285.3	271.9	268.1
57.5°	269.1	269.1	255.7	241.3	237.2
60°	250.0	250.0	236.6	222.2	216.6
62.5°	229.4	228.6	215.3	202.4	199.0
65°	200.4	198.5	186.1	174.6	171.8
67.5°	172.7	170.8	157.6	148.4	146.6
70°	153.6	151.8	139.3	131.6	129.8
72.5°	135.3	132.7	121.8	115.6	113.7
75°	108.8	105.0	96.4	92.5	91.6
77.5°	83.6	77.2	73.7	71.0	70.0
80°	66.8	61.2	59.2	57.2	56.3
82.5°	52.3	46.7	46.2	45.0	44.1
85°	31.5	27.8	27.7	26.7	25.8
87.5°	13.7	12.7	13.8	14.6	14.6
90°	3.8	9.6	15.6	19.6	19.6
92.5°	18.7	21.5	25.9	34.7	37.8
95°	47.1	77.2	42.4	47.5	56.2
97.5°	76.8	144.5	293.0	87.3	75.0
100°	100.5	179.8	584.5	172.4	114.5
102.5°	123.4	206.6	789.9	453.5	248.1
105°	157.8	238.0	895.6	1142.6	755.4
107.5°	193.2	253.3	855.1	1662.5	1556.3
110°	216.1	273.1	831.4	1746.8	1876.2



TEST NUMBER: P644889

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U930-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	239.8	296.8	807.7	1697.5	1915.7
115°	274.4	331.4	771.2	1600.9	1871.3
117.5°	311.0	367.0	762.3	1497.4	1775.5
120°	338.6	390.8	746.5	1418.7	1708.4
122.5°	357.6	414.4	726.8	1351.0	1617.5
125°	392.0	445.1	726.8	1269.3	1501.0
127.5°	419.7	474.5	727.7	1174.4	1403.2
130°	435.5	493.4	731.7	1110.9	1328.2
132.5°	454.4	512.4	730.9	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)