

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: P644884

Luminaire Tested: OMN4DIP-SR4F0-50D125U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644884
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-SR4F0-50D125U840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

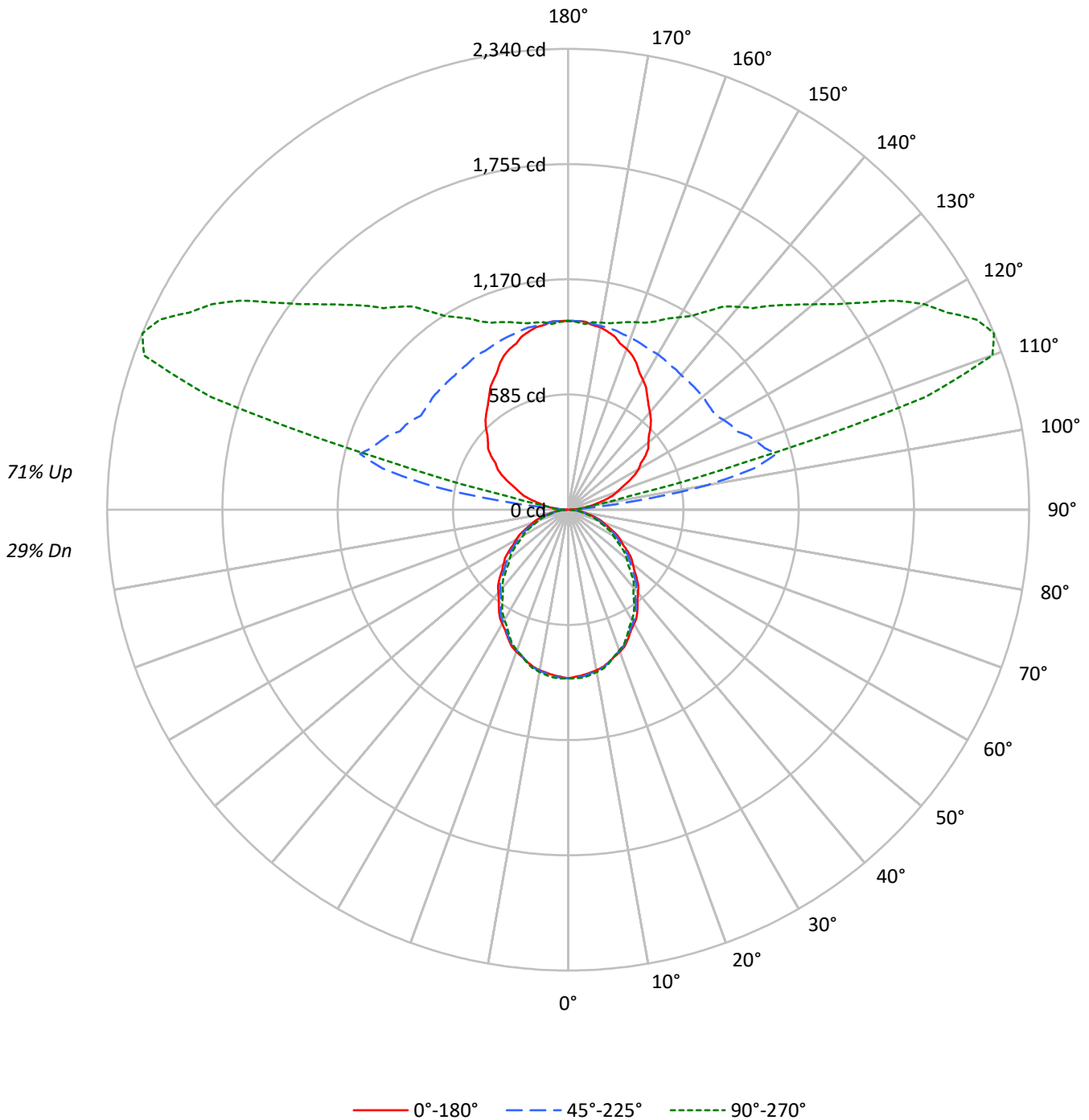
Lumens per Lamp: N/A
Luminaire Lumens: 7242.0 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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: P644884

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U840-FLLOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644884

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U840-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°	13831	13831	13831
5°	13676	13770	13864
10°	13565	13623	13719
15°	13382	13382	13461
20°	13196	13096	13055
25°	12852	12748	12581
30°	12471	12297	12059
35°	12082	11785	11509
40°	11618	11274	10882
45°	11230	10805	10271
50°	10743	10276	9748
55°	10334	9810	9219
60°	9859	9332	8541
65°	9349	8684	8015
70°	8856	8030	7482
75°	8291	7342	6981
80°	7587	6722	6397
85°	7132	6262	5835

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11230 cd/sqm



TEST NUMBER: P644884

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U840-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.6	1.1
10°-20°	226.1	3.1
20°-30°	328.8	4.5
30°-40°	374.0	5.2
40°-50°	364.6	5.0
50°-60°	311.3	4.3
60°-70°	226.2	3.1
70°-80°	127.9	1.8
80°-90°	41.5	0.6
90°-100°	122.9	1.7
100°-110°	842.8	11.6
110°-120°	1142.1	15.8
120°-130°	929.2	12.8
130°-140°	746.6	10.3
140°-150°	588.6	8.1
150°-160°	430.4	5.9
160°-170°	267.3	3.7
170°-180°	91.2	1.3
0°-30°	635.5	8.8
0°-40°	1009.5	13.9
0°-60°	1685.4	23.3
0°-90°	2081.0	28.7
90°-120°	2107.8	29.1
90°-150°	4372.2	60.4
90°-180°	5161.0	71.3
0°-180°	7242.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	857	857	857	857	857	
5°	844	856	850	849	855	80
15°	801	811	801	800	805	226
25°	721	728	716	703	706	332
35°	613	615	598	584	584	383
45°	492	490	473	457	450	378
55°	367	366	348	332	328	328
65°	245	242	227	213	210	243
75°	133	128	118	113	112	141
85°	38	34	34	33	32	41
90°	5	12	19	24	24	7
95°	58	94	52	58	69	61
105°	193	291	1094	1396	923	204
115°	335	405	942	1955	2286	333
125°	479	544	888	1550	1833	425
135°	591	656	892	1277	1465	455
145°	700	758	898	1112	1230	439
155°	820	850	917	1008	1055	376
165°	911	922	941	965	983	256
175°	959	965	959	953	947	91
180°	959	959	959	959	959	



TEST NUMBER: P644884

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U840-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	856.6	856.6	856.6	856.6	856.6
2.5°	849.1	860.1	853.8	853.9	857.5
5°	843.8	856.3	849.6	848.6	855.4
7.5°	834.9	847.2	839.3	838.1	847.0
10°	827.4	838.8	830.9	828.8	836.8
12.5°	817.2	828.6	820.7	817.6	825.6
15°	800.6	810.9	800.6	799.6	805.3
17.5°	782.0	790.9	779.0	775.1	779.4
20°	768.0	776.0	762.2	756.4	759.8
22.5°	750.3	758.3	743.5	735.0	739.3
25°	721.4	728.2	715.6	702.8	706.2
27.5°	690.4	695.6	682.9	669.9	671.0
30°	668.9	672.4	659.6	645.7	646.8
32.5°	646.6	649.1	635.4	620.5	620.7
35°	613.0	615.3	597.9	583.9	583.9
37.5°	577.3	578.7	560.1	544.9	543.3
40°	551.2	553.5	534.9	519.7	516.3
42.5°	527.0	527.5	510.7	495.4	491.1
45°	491.8	489.5	473.2	456.7	449.8
47.5°	453.8	453.8	435.2	418.7	412.3
50°	427.7	427.7	409.1	392.6	388.1
52.5°	403.5	402.6	384.8	368.4	362.0
55°	367.1	366.0	348.5	332.0	327.5
57.5°	328.6	328.6	312.3	294.7	289.7
60°	305.3	305.3	289.0	271.4	264.5
62.5°	280.2	279.3	262.9	247.2	243.1
65°	244.7	242.5	227.3	213.2	209.8
67.5°	210.9	208.7	192.5	181.3	179.0
70°	187.6	185.4	170.1	160.8	158.5
72.5°	165.3	162.1	148.7	141.2	138.9
75°	132.9	128.3	117.7	113.0	111.9
77.5°	102.1	94.3	90.0	86.7	85.5
80°	81.6	74.7	72.3	69.9	68.8
82.5°	63.9	57.0	56.4	55.0	53.8
85°	38.5	33.9	33.8	32.6	31.5
87.5°	16.8	15.5	16.9	17.8	17.8
90°	4.7	11.7	19.1	23.9	23.9
92.5°	22.9	26.3	31.7	42.4	46.2
95°	57.6	94.3	51.7	58.0	68.7
97.5°	93.8	176.5	357.8	106.7	91.6
100°	122.7	219.6	713.9	210.6	139.9
102.5°	150.7	252.3	964.8	553.9	303.0
105°	192.8	290.7	1093.8	1395.5	922.6
107.5°	236.0	309.4	1044.4	2030.4	1900.7
110°	264.0	333.6	1015.4	2133.4	2291.5



TEST NUMBER: P644884

CATALOG NUMBER: OMN4DIP-SR4F0-50D125U840-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	292.9	362.5	986.5	2073.2	2339.7
115°	335.2	404.8	941.9	1955.3	2285.5
117.5°	379.8	448.2	931.0	1828.9	2168.5
120°	413.6	477.3	911.7	1732.7	2086.5
122.5°	436.7	506.1	887.6	1650.0	1975.5
125°	478.7	543.6	887.6	1550.2	1833.2
127.5°	512.5	579.5	888.8	1434.3	1713.8
130°	531.8	602.6	893.6	1356.8	1622.1
132.5°	555.0	625.8	892.7	1322.0	1540.1
135°	591.0	655.8	892.5	1276.7	1465.4
137.5°	621.1	690.7	892.5	1226.6	1388.2
140°	645.2	710.1	892.5	1197.3	1344.7
142.5°	669.4	729.5	897.3	1163.4	1301.3
145°	699.5	758.5	898.5	1112.2	1230.2
147.5°	735.7	787.6	905.7	1075.5	1166.3
150°	759.8	807.0	910.6	1051.0	1127.7
152.5°	783.9	826.4	910.6	1031.4	1093.9
155°	820.1	849.6	916.6	1008.1	1055.3
157.5°	849.1	877.4	923.8	993.4	1027.6
160°	868.4	891.9	928.7	983.6	1013.1
162.5°	882.8	906.4	933.5	978.6	998.6
165°	910.6	922.4	940.7	965.2	982.9
167.5°	926.2	936.9	946.8	959.1	969.7
170°	940.7	946.6	946.8	958.9	964.8
172.5°	945.5	956.2	951.6	954.1	960.0
175°	958.8	964.7	958.8	952.6	946.8
177.5°	958.8	963.5	958.8	958.7	954.0
180°	958.8	958.8	958.8	958.8	958.8

(END OF REPORT)