

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: P644685

Luminaire Tested: OMN4DIP-SR4F0-125D100U935-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644685  
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-SR4F0-125D100U935-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

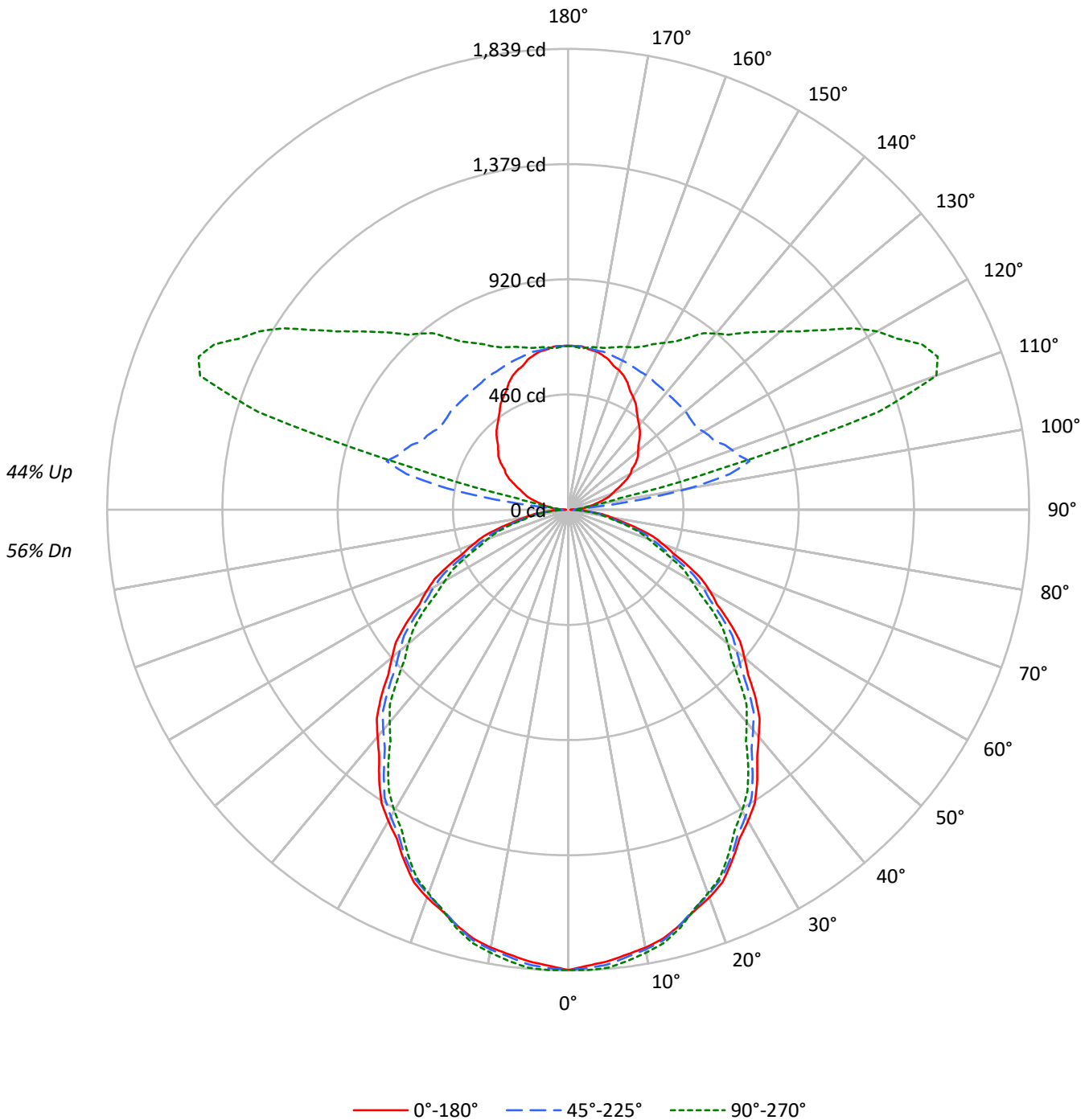
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7994.5 lumens  
Efficiency: N/A  
Efficacy: 115.9 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: General Diffuse

Input Watts (W): 69  
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	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	73	73	73	61	61	61	56
1	99	95	91	87	92	88	85	82	76	74	71	65	63	61	54	53	52	47
2	90	83	77	72	84	77	72	67	67	63	59	57	54	51	48	46	44	40
3	83	73	66	60	76	68	62	56	59	54	50	51	47	44	43	40	38	34
4	76	65	57	51	70	61	53	48	53	47	43	45	41	38	38	35	32	29
5	69	58	50	44	64	54	47	41	47	41	37	41	36	33	35	31	28	25
6	64	52	44	38	59	49	41	36	43	37	32	37	32	29	31	28	25	22
7	59	47	39	33	55	44	37	32	39	33	29	34	29	25	29	25	22	20
8	55	43	35	30	51	40	33	28	35	30	25	31	26	23	26	23	20	18
9	51	39	32	26	48	37	30	25	32	27	23	28	24	21	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	23	19	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	29657	29657	29657
5°	29324	29527	29729
10°	29091	29214	29419
15°	28699	28699	28866
20°	28297	28082	27996
25°	27558	27335	26981
30°	26744	26371	25859
35°	25909	25269	24677
40°	24915	24177	23334
45°	24080	23167	22028
50°	23039	22034	20904
55°	22159	21033	19767
60°	21145	20014	18319
65°	20050	18617	17184
70°	18996	17226	16046
75°	17773	15745	14966
80°	16262	14403	13705
85°	15283	13431	12505

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 24080 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.8	2.2
10°-20°	484.9	6.1
20°-30°	705.0	8.8
30°-40°	802.0	10.0
40°-50°	781.9	9.8
50°-60°	667.5	8.3
60°-70°	485.0	6.1
70°-80°	274.3	3.4
80°-90°	85.9	1.1
90°-100°	91.0	1.1
100°-110°	578.8	7.2
110°-120°	781.4	9.8
120°-130°	635.1	7.9
130°-140°	509.4	6.4
140°-150°	401.4	5.0
150°-160°	293.5	3.7
160°-170°	182.3	2.3
170°-180°	62.2	0.8
0°-30°	1362.7	17.0
0°-40°	2164.7	27.1
0°-60°	3614.1	45.2
0°-90°	4459.3	55.8
90°-120°	1451.3	18.2
90°-150°	2997.2	37.5
90°-180°	3535.0	44.2
0°-180°	7994.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1837	1837	1837	1837	1837	
5°	1809	1836	1822	1820	1834	172
15°	1717	1739	1717	1715	1727	484
25°	1547	1562	1534	1507	1514	712
35°	1314	1319	1282	1252	1252	821
45°	1055	1050	1015	979	965	812
55°	787	785	747	712	702	703
65°	525	520	487	457	450	521
75°	285	275	252	242	240	302
85°	82	73	72	70	68	88
90°	10	16	23	25	25	11
95°	53	71	40	45	50	52
105°	140	204	749	953	629	149
115°	234	280	644	1334	1559	233
125°	330	374	607	1057	1250	293
135°	403	447	609	871	999	310
145°	477	517	613	758	839	300
155°	559	579	625	688	720	257
165°	621	629	642	658	670	174
175°	654	658	654	650	646	62
180°	654	654	654	654	654	

TEST NUMBER: P644685

CATALOG NUMBER: OMN4DIP-SR4F0-125D100U935-FLLOOB-1DUDD-WW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1836.8	1836.8	1836.8	1836.8	1836.8
2.5°	1820.8	1844.3	1830.8	1831.0	1838.8
5°	1809.3	1836.2	1821.8	1819.7	1834.3
7.5°	1790.4	1816.7	1799.8	1797.3	1816.3
10°	1774.4	1798.8	1781.9	1777.2	1794.4
12.5°	1752.4	1776.8	1759.9	1753.3	1770.4
15°	1716.9	1738.9	1716.9	1714.7	1726.9
17.5°	1676.9	1696.0	1670.4	1662.1	1671.4
20°	1646.9	1664.0	1634.4	1622.1	1629.4
22.5°	1608.9	1626.0	1594.4	1576.1	1585.4
25°	1546.9	1561.6	1534.4	1507.1	1514.5
27.5°	1480.5	1491.7	1464.5	1436.5	1439.0
30°	1434.5	1441.8	1414.5	1384.6	1387.0
32.5°	1386.5	1391.9	1362.5	1330.5	1331.0
35°	1314.5	1319.4	1282.0	1252.0	1252.0
37.5°	1238.1	1241.0	1201.1	1168.5	1165.1
40°	1182.1	1187.0	1147.1	1114.4	1107.1
42.5°	1130.1	1131.1	1095.1	1062.4	1053.1
45°	1054.6	1049.7	1014.6	979.3	964.7
47.5°	973.1	973.1	933.2	897.9	884.2
50°	917.2	917.2	877.2	842.0	832.2
52.5°	865.2	863.2	825.2	789.9	776.2
55°	787.2	784.8	747.2	712.0	702.2
57.5°	704.7	704.7	669.8	632.0	621.3
60°	654.8	654.8	619.8	582.0	567.3
62.5°	600.8	598.8	563.8	530.1	521.3
65°	524.8	519.9	487.3	457.2	449.8
67.5°	452.3	447.4	412.9	388.7	383.9
70°	402.4	397.5	364.9	344.8	339.9
72.5°	354.4	347.5	318.9	302.8	297.9
75°	284.9	275.1	252.4	242.4	239.9
77.5°	218.9	202.3	192.9	185.9	183.4
80°	174.9	160.3	154.9	149.9	147.4
82.5°	137.0	122.3	121.0	117.9	115.5
85°	82.5	72.7	72.5	69.9	67.5
87.5°	36.0	31.4	32.6	33.0	33.0
90°	10.0	16.5	23.2	24.8	24.8
92.5°	27.9	26.5	29.1	36.0	37.3
95°	52.9	71.3	40.4	44.6	50.2
97.5°	75.9	127.3	248.8	75.8	64.2
100°	95.6	156.7	490.3	145.3	97.1
102.5°	113.4	177.6	661.4	379.4	206.9
105°	140.0	203.5	749.4	953.4	629.2
107.5°	169.1	216.2	715.6	1386.4	1296.3
110°	186.8	232.6	695.9	1456.6	1562.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	206.6	252.4	676.2	1415.6	1595.7
115°	233.7	279.5	644.1	1333.5	1558.7
117.5°	264.1	309.1	636.7	1247.3	1478.9
120°	287.2	328.9	623.5	1181.7	1422.9
122.5°	301.6	348.6	607.0	1125.3	1347.3
125°	329.9	374.1	607.0	1057.2	1250.2
127.5°	351.2	398.2	607.9	978.2	1168.8
130°	364.4	412.7	611.2	925.3	1106.3
132.5°	378.9	427.1	609.2	901.6	1050.3
135°	403.0	447.3	608.7	870.7	999.3
137.5°	423.6	471.0	608.7	836.5	946.7
140°	440.0	484.3	608.7	816.6	917.1
142.5°	456.5	497.5	611.9	793.4	887.5
145°	477.1	517.3	612.8	758.5	839.0
147.5°	501.7	537.1	617.7	733.4	795.4
150°	518.2	550.4	621.0	716.8	769.0
152.5°	534.6	563.6	621.0	703.4	746.0
155°	559.3	579.4	625.1	687.5	719.7
157.5°	579.0	598.3	630.0	677.5	700.8
160°	592.2	608.3	633.3	670.8	690.9
162.5°	602.1	618.2	636.6	667.4	681.0
165°	621.0	629.0	641.6	658.3	670.3
167.5°	631.7	638.9	645.7	654.1	661.3
170°	641.6	645.6	645.7	654.0	658.0
172.5°	644.8	652.1	649.0	650.7	654.7
175°	653.9	657.9	653.9	649.7	645.7
177.5°	653.9	657.1	653.9	653.8	650.6
180°	653.9	653.9	653.9	653.9	653.9

(END OF REPORT)