

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: P644829

Luminaire Tested: OMN4DIP-SR4F0-125D75U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644829  
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-SR4F0-125D75U930-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

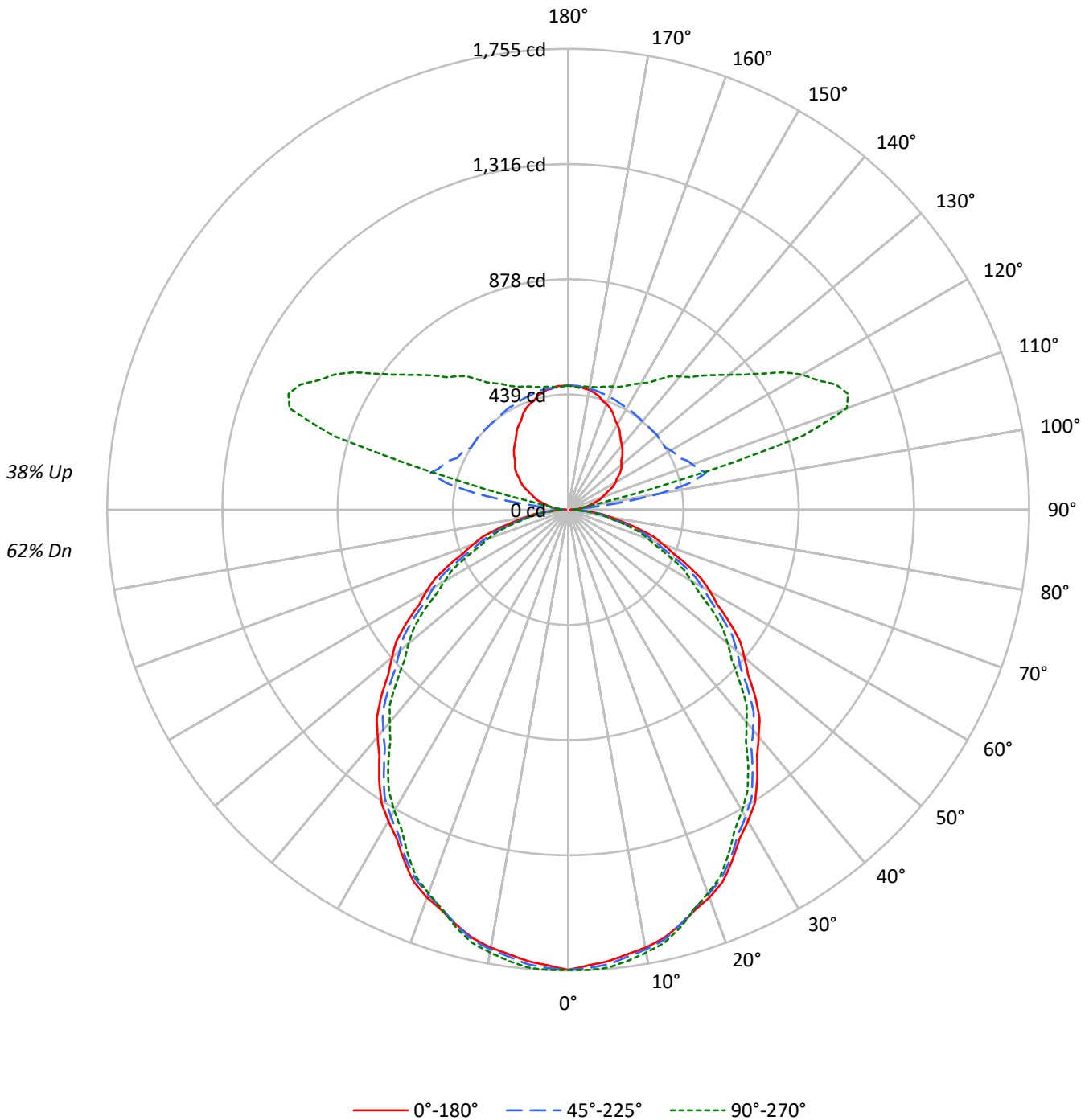
Lumens per Lamp: N/A  
Luminaire Lumens: 6814.0 lumens  
Efficiency: N/A  
Efficacy: 112.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 60.8  
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	62
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	58	57	53
2	92	84	78	73	86	79	74	69	70	65	62	61	58	55	53	50	48	44
3	84	74	67	61	78	70	63	58	62	56	52	54	50	47	47	44	41	38
4	77	66	58	52	72	62	55	49	55	49	45	48	44	40	42	39	36	33
5	71	59	51	44	66	55	48	43	49	43	39	43	39	35	38	34	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	31	35	31	28	25
7	60	48	40	34	56	45	38	33	40	34	30	36	31	27	32	28	25	22
8	56	44	36	30	53	41	34	29	37	31	27	33	28	24	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	29	24	46	35	28	24	31	26	22	28	23	20	25	21	18	16

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

	0°	45°	90°
0°	28299	28299	28299
5°	27982	28175	28368
10°	27758	27876	28071
15°	27385	27385	27544
20°	27002	26797	26715
25°	26297	26085	25744
30°	25519	25163	24675
35°	24723	24112	23548
40°	23773	23071	22266
45°	22978	22108	21018
50°	21984	21024	19947
55°	21146	20071	18863
60°	20176	19097	17479
65°	19133	17765	16397
70°	18123	16438	15309
75°	16962	15028	14279
80°	15518	13742	13082
85°	14579	12819	11930

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 22978 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.9	2.4
10°-20°	462.7	6.8
20°-30°	672.7	9.9
30°-40°	765.3	11.2
40°-50°	746.1	10.9
50°-60°	636.9	9.3
60°-70°	462.8	6.8
70°-80°	261.7	3.8
80°-90°	81.7	1.2
90°-100°	68.3	1.0
100°-110°	419.6	6.2
110°-120°	565.4	8.3
120°-130°	459.3	6.7
130°-140°	368.0	5.4
140°-150°	290.0	4.3
150°-160°	212.0	3.1
160°-170°	131.7	1.9
170°-180°	44.9	0.7
0°-30°	1300.3	19.1
0°-40°	2065.5	30.3
0°-60°	3448.6	50.6
0°-90°	4254.8	62.4
90°-120°	1053.2	15.5
90°-150°	2170.6	31.9
90°-180°	2559.0	37.6
0°-180°	6814.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1753	1753	1753	1753	1753	
5°	1726	1752	1738	1736	1750	164
15°	1638	1659	1638	1636	1648	462
25°	1476	1490	1464	1438	1445	679
35°	1254	1259	1223	1195	1195	783
45°	1006	1002	968	934	920	774
55°	751	749	713	679	670	670
65°	501	496	465	436	429	497
75°	272	262	241	231	229	289
85°	79	69	69	67	64	84
90°	10	15	20	21	21	11
95°	43	54	31	34	38	41
105°	104	149	543	689	455	111
115°	171	203	466	963	1126	170
125°	240	272	439	764	903	212
135°	291	323	440	629	722	224
145°	345	374	443	548	606	216
155°	404	419	452	497	520	186
165°	449	454	464	476	484	126
175°	472	475	472	469	466	45
180°	472	472	472	472	472	

TEST NUMBER: P644829

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1752.7	1752.7	1752.7	1752.7	1752.7
2.5°	1737.5	1759.8	1747.0	1747.2	1754.6
5°	1726.5	1752.1	1738.4	1736.3	1750.3
7.5°	1708.4	1733.6	1717.4	1715.0	1733.2
10°	1693.1	1716.4	1700.3	1695.9	1712.2
12.5°	1672.1	1695.4	1679.3	1673.0	1689.3
15°	1638.3	1659.2	1638.3	1636.1	1647.8
17.5°	1600.1	1618.3	1593.9	1586.0	1594.9
20°	1571.5	1587.8	1559.6	1547.8	1554.8
22.5°	1535.2	1551.6	1521.4	1504.0	1512.8
25°	1476.1	1490.1	1464.2	1438.1	1445.1
27.5°	1412.7	1423.4	1397.4	1370.8	1373.1
30°	1368.8	1375.8	1349.7	1321.2	1323.5
32.5°	1323.0	1328.1	1300.1	1269.6	1270.1
35°	1254.3	1259.0	1223.3	1194.7	1194.7
37.5°	1181.4	1184.2	1146.1	1115.0	1111.7
40°	1127.9	1132.6	1094.6	1063.4	1056.4
42.5°	1078.3	1079.3	1045.0	1013.8	1004.9
45°	1006.3	1001.7	968.2	934.5	920.5
47.5°	928.6	928.6	890.4	856.7	843.7
50°	875.2	875.2	837.0	803.4	794.1
52.5°	825.6	823.7	787.4	753.7	740.7
55°	751.2	748.8	713.0	679.4	670.1
57.5°	672.5	672.5	639.1	603.1	592.8
60°	624.8	624.8	591.4	555.3	541.3
62.5°	573.3	571.4	538.0	505.8	497.4
65°	500.8	496.1	465.0	436.2	429.2
67.5°	431.6	427.0	393.9	370.9	366.3
70°	383.9	379.3	348.2	329.0	324.3
72.5°	338.1	331.6	304.3	288.9	284.3
75°	271.9	262.5	240.9	231.3	228.9
77.5°	208.9	193.0	184.1	177.4	175.0
80°	166.9	152.9	147.8	143.0	140.7
82.5°	130.7	116.7	115.4	112.5	110.2
85°	78.7	69.4	69.2	66.7	64.4
87.5°	34.3	29.8	30.8	30.9	30.9
90°	9.5	14.8	20.3	20.8	20.8
92.5°	24.3	22.1	23.6	28.4	28.9
95°	42.8	53.9	30.9	34.0	37.5
97.5°	58.9	94.3	181.4	55.8	47.0
100°	73.1	115.5	355.4	105.6	70.7
102.5°	85.5	130.2	479.0	274.7	149.6
105°	104.0	148.8	542.6	689.3	454.6
107.5°	124.9	157.9	518.2	1002.2	936.5
110°	137.3	169.8	503.9	1052.9	1129.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	151.6	184.1	489.7	1023.3	1152.8
115°	170.6	203.1	465.9	963.4	1126.1
117.5°	192.6	224.5	460.5	901.1	1068.4
120°	209.2	238.8	451.0	853.7	1028.0
122.5°	219.2	253.0	439.2	813.0	973.4
125°	239.5	271.5	439.2	763.8	903.2
127.5°	254.3	288.7	439.7	706.7	844.4
130°	263.9	298.7	442.1	668.5	799.3
132.5°	273.8	308.7	440.2	651.4	758.8
135°	291.2	323.1	439.7	629.0	722.0
137.5°	306.0	340.3	439.7	604.4	684.0
140°	317.9	349.9	439.7	589.9	662.6
142.5°	329.8	359.4	442.1	573.2	641.2
145°	344.7	373.7	442.7	548.0	606.1
147.5°	362.5	388.1	446.3	529.9	574.6
150°	374.4	397.6	448.7	517.8	555.6
152.5°	386.3	407.2	448.7	508.2	539.0
155°	404.1	418.6	451.6	496.7	520.0
157.5°	418.3	432.3	455.2	489.4	506.3
160°	427.9	439.5	457.6	484.6	499.2
162.5°	435.0	446.6	459.9	482.2	492.0
165°	448.7	454.5	463.5	475.6	484.3
167.5°	456.4	461.6	466.5	472.5	477.8
170°	463.5	466.4	466.5	472.5	475.4
172.5°	465.9	471.1	468.9	470.1	473.0
175°	472.4	475.3	472.4	469.4	466.5
177.5°	472.4	474.7	472.4	472.4	470.0
180°	472.4	472.4	472.4	472.4	472.4

(END OF REPORT)