

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: P644691

Luminaire Tested: OMN4DIP-SR4F0-125D100U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644691  
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-SR4F0-125D100U940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

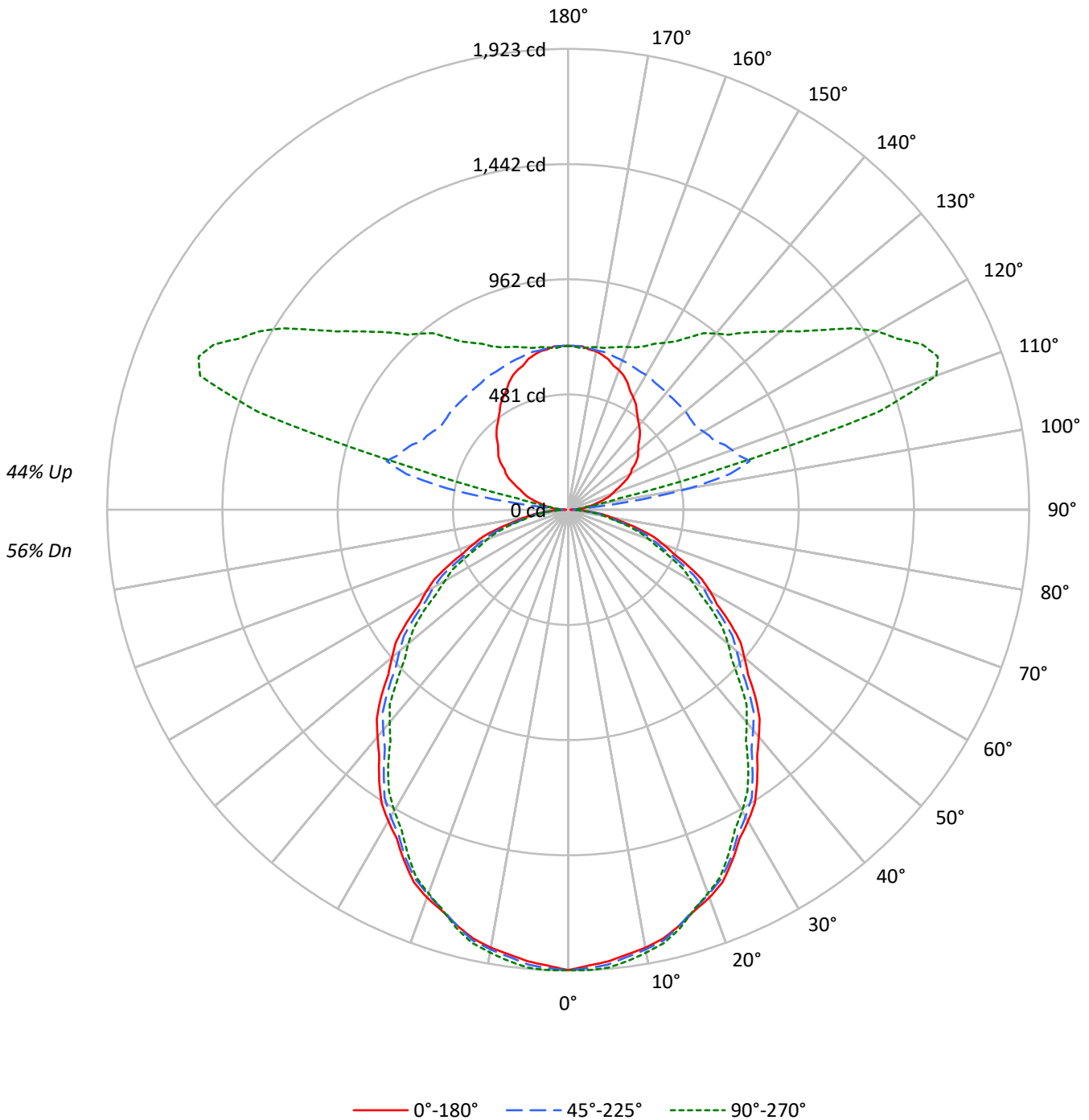
Lumens per Lamp: N/A  
Luminaire Lumens: 8361.0 lumens  
Efficiency: N/A  
Efficacy: 121.2 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse

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°	31018	31018	31018
5°	30669	30882	31092
10°	30424	30554	30767
15°	30014	30014	30190
20°	29594	29369	29280
25°	28823	28589	28217
30°	27971	27579	27044
35°	27098	26428	25811
40°	26057	25286	24405
45°	25186	24231	23037
50°	24094	23044	21863
55°	23175	21999	20673
60°	22113	20931	19159
65°	20970	19473	17975
70°	19865	18014	16782
75°	18590	16469	15652
80°	17015	15063	14338
85°	15987	14042	13079

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 25186 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.7	2.2
10°-20°	507.1	6.1
20°-30°	737.3	8.8
30°-40°	838.7	10.0
40°-50°	817.8	9.8
50°-60°	698.1	8.3
60°-70°	507.3	6.1
70°-80°	286.9	3.4
80°-90°	89.9	1.1
90°-100°	95.2	1.1
100°-110°	605.4	7.2
110°-120°	817.2	9.8
120°-130°	664.2	7.9
130°-140°	532.7	6.4
140°-150°	419.8	5.0
150°-160°	306.9	3.7
160°-170°	190.7	2.3
170°-180°	65.0	0.8
0°-30°	1425.2	17.0
0°-40°	2263.9	27.1
0°-60°	3779.8	45.2
0°-90°	4663.8	55.8
90°-120°	1517.8	18.2
90°-150°	3134.5	37.5
90°-180°	3697.0	44.2
0°-180°	8361.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1921	1921	1921	1921	1921	
5°	1892	1920	1905	1903	1918	179
15°	1796	1819	1796	1793	1806	506
25°	1618	1633	1605	1576	1584	744
35°	1375	1380	1341	1310	1310	858
45°	1103	1098	1061	1024	1009	849
55°	823	821	782	745	734	735
65°	549	544	510	478	470	545
75°	298	288	264	254	251	316
85°	86	76	76	73	71	92
90°	10	17	24	26	26	12
95°	55	74	42	47	52	54
105°	146	213	784	997	658	156
115°	244	292	674	1395	1630	244
125°	345	391	635	1106	1308	306
135°	422	468	637	911	1045	325
145°	499	541	641	793	877	313
155°	585	606	654	719	753	269
165°	650	658	671	688	701	182
175°	684	688	684	680	675	65
180°	684	684	684	684	684	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1921.1	1921.1	1921.1	1921.1	1921.1
2.5°	1904.3	1928.9	1914.8	1915.0	1923.1
5°	1892.3	1920.4	1905.4	1903.1	1918.4
7.5°	1872.4	1900.0	1882.4	1879.7	1899.6
10°	1855.7	1881.3	1863.6	1858.7	1876.6
12.5°	1832.7	1858.3	1840.6	1833.6	1851.5
15°	1795.6	1818.6	1795.6	1793.3	1806.1
17.5°	1753.8	1773.7	1747.0	1738.3	1748.0
20°	1722.4	1740.3	1709.3	1696.5	1704.1
22.5°	1682.7	1700.6	1667.5	1648.4	1658.1
25°	1617.9	1633.2	1604.8	1576.2	1583.9
27.5°	1548.3	1560.1	1531.6	1502.4	1505.0
30°	1500.3	1507.9	1479.3	1448.0	1450.6
32.5°	1450.1	1455.7	1425.0	1391.5	1392.0
35°	1374.8	1379.9	1340.8	1309.5	1309.5
37.5°	1294.8	1297.9	1256.1	1222.1	1218.5
40°	1236.3	1241.4	1199.7	1165.5	1157.9
42.5°	1181.9	1182.9	1145.3	1111.1	1101.4
45°	1103.0	1097.9	1061.2	1024.2	1008.9
47.5°	1017.8	1017.8	975.9	939.0	924.7
50°	959.2	959.2	917.4	880.6	870.4
52.5°	904.9	902.8	863.0	826.1	811.8
55°	823.3	820.8	781.5	744.7	734.4
57.5°	737.1	737.1	700.5	661.0	649.8
60°	684.8	684.8	648.2	608.6	593.3
62.5°	628.3	626.3	589.6	554.4	545.2
65°	548.9	543.8	509.7	478.1	470.5
67.5°	473.1	468.0	431.8	406.6	401.5
70°	420.8	415.7	381.6	360.6	355.5
72.5°	370.6	363.5	333.5	316.7	311.6
75°	298.0	287.7	264.0	253.5	250.9
77.5°	229.0	211.6	201.8	194.4	191.8
80°	183.0	167.6	162.0	156.8	154.2
82.5°	143.2	127.9	126.5	123.3	120.8
85°	86.3	76.0	75.8	73.1	70.6
87.5°	37.6	32.9	34.1	34.5	34.5
90°	10.5	17.2	24.3	26.0	26.0
92.5°	29.1	27.7	30.4	37.7	39.0
95°	55.3	74.5	42.2	46.7	52.5
97.5°	79.4	133.1	260.2	79.3	67.1
100°	100.0	163.8	512.8	152.0	101.5
102.5°	118.6	185.8	691.7	396.8	216.4
105°	146.4	212.8	783.7	997.1	658.1
107.5°	176.8	226.1	748.5	1449.9	1355.7
110°	195.4	243.3	727.8	1523.4	1634.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	216.0	264.0	707.2	1480.5	1668.8
115°	244.4	292.3	673.6	1394.6	1630.1
117.5°	276.2	323.3	665.8	1304.4	1546.7
120°	300.3	344.0	652.1	1235.9	1488.2
122.5°	315.4	364.5	634.9	1176.9	1409.0
125°	345.0	391.3	634.9	1105.7	1307.5
127.5°	367.3	416.5	635.7	1023.0	1222.4
130°	381.1	431.6	639.2	967.7	1157.0
132.5°	396.2	446.7	637.1	942.9	1098.5
135°	421.5	467.8	636.6	910.6	1045.2
137.5°	443.0	492.6	636.6	874.9	990.1
140°	460.2	506.5	636.6	854.0	959.1
142.5°	477.4	520.3	640.0	829.8	928.2
145°	498.9	541.0	640.9	793.3	877.4
147.5°	524.7	561.7	646.0	767.1	831.8
150°	541.9	575.6	649.5	749.6	804.3
152.5°	559.1	589.4	649.5	735.6	780.2
155°	585.0	606.0	653.8	719.0	752.7
157.5°	605.6	625.8	658.9	708.5	732.9
160°	619.4	636.2	662.4	701.6	722.6
162.5°	629.7	646.5	665.8	698.0	712.3
165°	649.5	657.9	671.0	688.5	701.1
167.5°	660.7	668.2	675.3	684.0	691.6
170°	671.0	675.2	675.3	684.0	688.2
172.5°	674.4	682.0	678.7	680.5	684.7
175°	683.9	688.1	683.9	679.5	675.3
177.5°	683.9	687.2	683.9	683.8	680.4
180°	683.9	683.9	683.9	683.9	683.9

(END OF REPORT)