

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: P644745

Luminaire Tested: OMN4DIP-SR4F0-125D150U935-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644745  
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-SR4F0-125D150U935-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

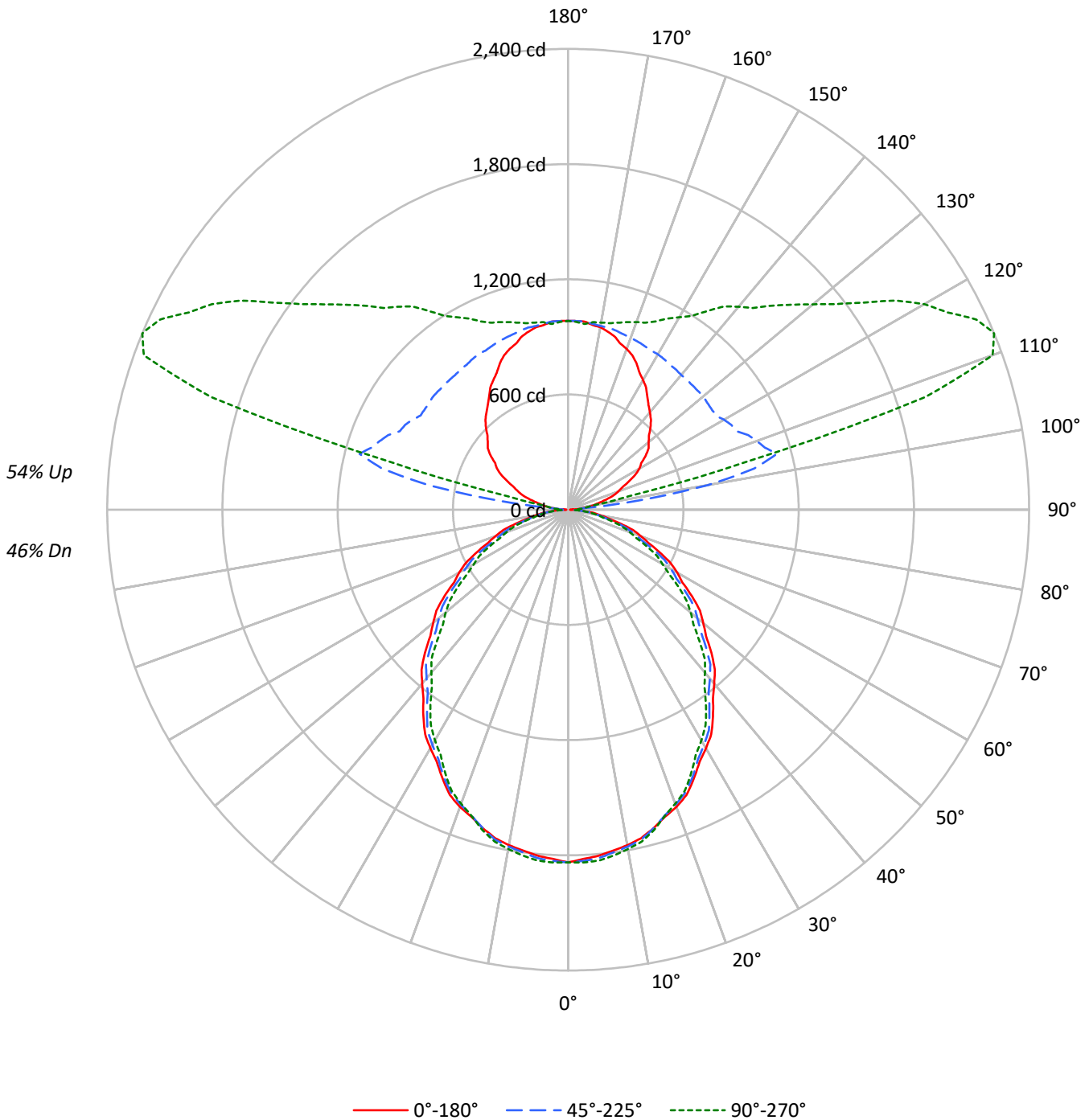
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9766.2 lumens  
Efficiency: N/A  
Efficacy: 110.2 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): 88.6  
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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46				
1	97	93	89	85	89	85	82	79	71	69	67	58	56	55	46	45	44	39				
2	88	81	75	70	81	74	69	65	62	58	55	51	48	46	41	39	37	32				
3	81	71	64	58	74	66	59	54	55	50	47	45	42	39	36	34	32	28				
4	74	63	55	49	67	58	51	46	49	44	40	40	37	34	32	30	28	24				
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24	21				
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	21	18				
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19	16				
8	54	41	34	28	49	38	32	27	33	27	23	27	23	20	22	19	17	15				
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13				
10	47	35	27	23	43	32	26	21	28	22	19	23	19	16	19	16	14	12				

**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	1.8
10°-20°	484.9	5.0
20°-30°	705.0	7.2
30°-40°	802.0	8.2
40°-50°	781.9	8.0
50°-60°	667.5	6.8
60°-70°	485.0	5.0
70°-80°	274.3	2.8
80°-90°	86.7	0.9
90°-100°	131.6	1.3
100°-110°	867.7	8.9
110°-120°	1173.5	12.0
120°-130°	954.3	9.8
130°-140°	766.1	7.8
140°-150°	603.8	6.2
150°-160°	441.5	4.5
160°-170°	274.2	2.8
170°-180°	93.5	1.0
0°-30°	1362.7	14.0
0°-40°	2164.7	22.2
0°-60°	3614.1	37.0
0°-90°	4460.1	45.7
90°-120°	2172.8	22.2
90°-150°	4497.0	46.0
90°-180°	5306.0	54.3
0°-180°	9766.2	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	18	27	31	31	12
95°	70	102	57	63	73	70
105°	204	302	1125	1433	946	216
115°	348	418	968	2006	2344	346
125°	494	560	912	1590	1881	438
135°	606	673	916	1310	1503	467
145°	718	778	922	1141	1262	451
155°	841	872	940	1034	1083	386
165°	934	946	965	990	1008	262
175°	984	990	984	977	971	93
180°	984	984	984	984	984	



TEST NUMBER: P644745

CATALOG NUMBER: OMN4DIP-SR4F0-125D150U935-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	31.8	33.5	34.2	34.2
90°	10.0	18.5	27.4	31.1	31.1
92.5°	32.8	33.5	38.2	48.9	51.8
95°	69.5	102.0	57.0	63.4	73.0
97.5°	105.3	186.3	370.7	111.8	95.3
100°	135.0	230.5	735.0	217.4	144.8
102.5°	162.7	263.1	992.3	569.5	311.0
105°	204.3	302.2	1124.7	1432.8	946.5
107.5°	248.3	321.3	1074.0	2084.2	1949.9
110°	276.0	346.1	1044.3	2189.9	2350.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	305.7	375.8	1014.6	2128.1	2400.2
115°	347.7	417.9	967.5	2005.8	2344.5
117.5°	393.5	462.4	956.4	1876.1	2224.5
120°	428.2	492.2	936.6	1777.5	2140.4
122.5°	450.9	521.8	911.9	1692.7	2026.6
125°	493.7	560.2	911.9	1590.2	1880.6
127.5°	527.1	596.8	913.1	1471.4	1758.1
130°	546.9	619.5	918.0	1391.9	1664.1
132.5°	569.6	642.2	916.0	1356.1	1579.9
135°	606.2	672.8	915.5	1309.7	1503.2
137.5°	637.2	708.5	915.5	1258.3	1424.0
140°	661.9	728.5	915.5	1228.3	1379.5
142.5°	686.7	748.4	920.5	1193.4	1335.0
145°	717.6	778.1	921.7	1141.0	1262.0
147.5°	754.7	807.9	929.2	1103.2	1196.4
150°	779.5	827.8	934.1	1078.2	1156.8
152.5°	804.2	847.7	934.1	1058.0	1122.2
155°	841.3	871.6	940.3	1034.2	1082.6
157.5°	871.0	900.0	947.7	1019.0	1054.1
160°	890.8	915.0	952.7	1009.0	1039.3
162.5°	905.7	929.8	957.6	1003.9	1024.4
165°	934.1	946.2	965.0	990.2	1008.3
167.5°	950.2	961.1	971.2	983.8	994.7
170°	965.0	971.1	971.2	983.7	989.8
172.5°	970.0	980.9	976.2	978.8	984.8
175°	983.6	989.6	983.6	977.3	971.2
177.5°	983.6	988.4	983.6	983.5	978.6
180°	983.6	983.6	983.6	983.6	983.6

(END OF REPORT)