

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: P644820

Luminaire Tested: OMN4DIP-SR4F0-125D75U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644820  
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-SR4F0-125D75U835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

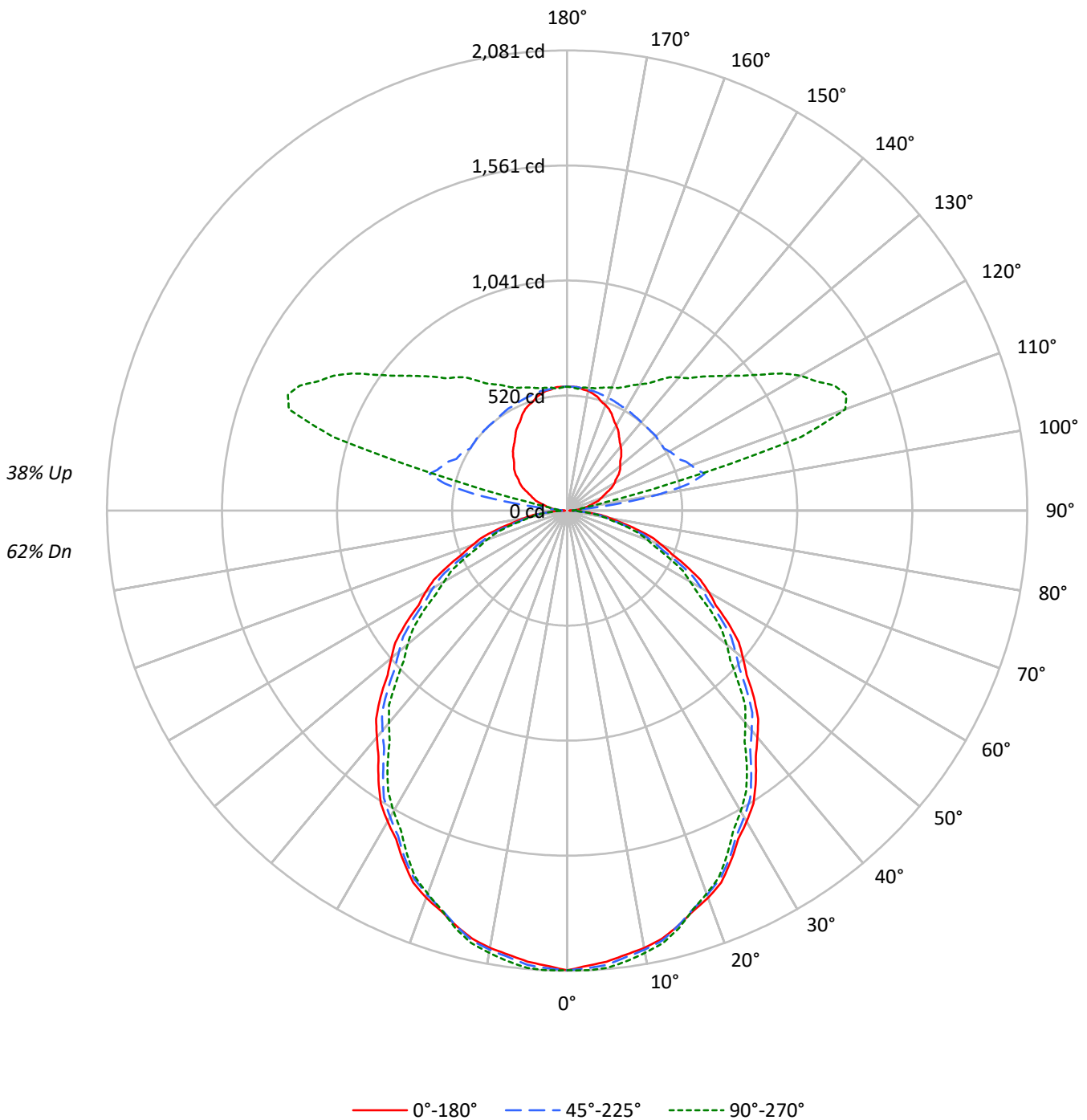
Lumens per Lamp: N/A  
Luminaire Lumens: 8081.2 lumens  
Efficiency: N/A  
Efficacy: 132.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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

TEST NUMBER: P644820

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U835-FLLOOB-1DUDD-WW

### Luminous Intensity Polar Plot





TEST NUMBER: P644820

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U835-FLLOOB-1DUDD-WW

**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°	33562	33562	33562
5°	33187	33415	33645
10°	32921	33060	33292
15°	32476	32476	32665
20°	32022	31780	31682
25°	31187	30936	30533
30°	30266	29843	29263
35°	29321	28596	27928
40°	28195	27360	26407
45°	27252	26218	24928
50°	26070	24935	23657
55°	25078	23803	22370
60°	23928	22649	20731
65°	22690	21070	19450
70°	21493	19492	18156
75°	20112	17817	16937
80°	18410	16299	15518
85°	17284	15191	14153

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 27252 cd/sqm



TEST NUMBER: P644820

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U835-FLLOOB-1DUDD-WW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.5	2.4
10°-20°	548.7	6.8
20°-30°	797.9	9.9
30°-40°	907.6	11.2
40°-50°	884.9	10.9
50°-60°	755.3	9.3
60°-70°	548.9	6.8
70°-80°	310.4	3.8
80°-90°	96.8	1.2
90°-100°	80.9	1.0
100°-110°	497.6	6.2
110°-120°	670.5	8.3
120°-130°	544.7	6.7
130°-140°	436.5	5.4
140°-150°	343.9	4.3
150°-160°	251.5	3.1
160°-170°	156.2	1.9
170°-180°	53.3	0.7
0°-30°	1542.1	19.1
0°-40°	2449.7	30.3
0°-60°	4089.9	50.6
0°-90°	5046.1	62.4
90°-120°	1249.1	15.5
90°-150°	2574.2	31.9
90°-180°	3035.0	37.6
0°-180°	8081.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2079	2079	2079	2079	2079	
5°	2048	2078	2062	2059	2076	194
15°	1943	1968	1943	1940	1954	548
25°	1751	1767	1736	1706	1714	805
35°	1488	1493	1451	1417	1417	929
45°	1194	1188	1148	1108	1092	918
55°	891	888	846	806	795	795
65°	594	588	552	517	509	590
75°	322	311	286	274	272	342
85°	93	82	82	79	76	100
90°	11	18	24	25	25	13
95°	51	64	37	40	44	49
105°	123	176	644	818	539	131
115°	202	241	552	1143	1336	202
125°	284	322	521	906	1071	252
135°	345	383	522	746	856	266
145°	409	443	525	650	719	257
155°	479	496	536	589	617	220
165°	532	539	550	564	574	149
175°	560	564	560	557	553	53
180°	560	560	560	560	560	

TEST NUMBER: P644820

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U835-FLLOOB-1DUDD-WW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2060.6	2087.1	2071.9	2072.1	2080.9
5°	2047.6	2078.0	2061.7	2059.3	2075.9
7.5°	2026.1	2055.9	2036.8	2033.9	2055.5
10°	2008.0	2035.6	2016.5	2011.2	2030.6
12.5°	1983.1	2010.7	1991.6	1984.1	2003.5
15°	1942.9	1967.8	1942.9	1940.4	1954.2
17.5°	1897.7	1919.2	1890.3	1881.0	1891.5
20°	1863.7	1883.1	1849.6	1835.6	1843.9
22.5°	1820.8	1840.1	1804.4	1783.7	1794.2
25°	1750.6	1767.2	1736.5	1705.6	1713.9
27.5°	1675.4	1688.1	1657.3	1625.7	1628.4
30°	1623.4	1631.6	1600.7	1566.9	1569.6
32.5°	1569.1	1575.1	1541.9	1505.7	1506.3
35°	1487.6	1493.1	1450.8	1416.9	1416.9
37.5°	1401.1	1404.4	1359.2	1322.3	1318.5
40°	1337.7	1343.2	1298.1	1261.2	1252.9
42.5°	1278.9	1280.0	1239.3	1202.3	1191.8
45°	1193.5	1187.9	1148.2	1108.3	1091.7
47.5°	1101.3	1101.3	1056.0	1016.1	1000.6
50°	1037.9	1037.9	992.7	952.8	941.8
52.5°	979.1	976.9	933.9	893.9	878.4
55°	890.9	888.1	845.6	805.8	794.7
57.5°	797.5	797.5	757.9	715.2	703.1
60°	741.0	741.0	701.4	658.6	642.0
62.5°	679.9	677.7	638.0	599.9	589.9
65°	593.9	588.4	551.5	517.4	509.1
67.5°	511.9	506.4	467.2	439.9	434.4
70°	455.3	449.8	412.9	390.2	384.6
72.5°	401.0	393.3	360.9	342.6	337.1
75°	322.4	311.3	285.6	274.3	271.5
77.5°	247.7	228.9	218.3	210.4	207.6
80°	198.0	181.4	175.3	169.6	166.9
82.5°	155.0	138.4	136.9	133.4	130.7
85°	93.3	82.3	82.0	79.1	76.4
87.5°	40.7	35.3	36.5	36.6	36.6
90°	11.3	17.5	24.0	24.7	24.7
92.5°	28.8	26.2	27.9	33.7	34.3
95°	50.8	63.9	36.7	40.3	44.4
97.5°	69.8	111.8	215.1	66.2	55.7
100°	86.7	137.0	421.5	125.2	83.9
102.5°	101.4	154.4	568.0	325.8	177.5
105°	123.4	176.4	643.5	817.5	539.1
107.5°	148.2	187.3	614.6	1188.6	1110.7
110°	162.8	201.4	597.6	1248.8	1339.0



TEST NUMBER: P644820

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U835-FLLOOB-1DUDD-WW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	179.7	218.3	580.7	1213.6	1367.2
115°	202.3	240.9	552.5	1142.6	1335.5
117.5°	228.4	266.3	546.2	1068.7	1267.1
120°	248.1	283.2	534.9	1012.5	1219.2
122.5°	259.9	300.0	520.8	964.2	1154.4
125°	284.0	321.9	520.8	905.8	1071.2
127.5°	301.6	342.4	521.5	838.1	1001.5
130°	312.9	354.3	524.3	792.8	947.9
132.5°	324.8	366.1	522.1	772.5	900.0
135°	345.3	383.2	521.5	746.0	856.3
137.5°	362.9	403.6	521.5	716.8	811.2
140°	377.0	414.9	521.5	699.7	785.8
142.5°	391.1	426.3	524.3	679.8	760.4
145°	408.8	443.2	525.0	649.9	718.8
147.5°	429.9	460.2	529.3	628.4	681.5
150°	444.0	471.6	532.1	614.2	658.9
152.5°	458.1	482.9	532.1	602.7	639.2
155°	479.2	496.5	535.6	589.1	616.7
157.5°	496.1	512.7	539.8	580.5	600.4
160°	507.4	521.2	542.7	574.8	592.0
162.5°	515.9	529.7	545.5	571.8	583.5
165°	532.1	539.0	549.7	564.0	574.4
167.5°	541.2	547.5	553.2	560.4	566.6
170°	549.7	553.2	553.2	560.4	563.8
172.5°	552.5	558.7	556.0	557.5	561.0
175°	560.3	563.7	560.3	556.7	553.2
177.5°	560.3	563.0	560.3	560.2	557.5
180°	560.3	560.3	560.3	560.3	560.3

(END OF REPORT)