

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: P644805

Luminaire Tested: OMN4DIP-SR4F0-125D50U935-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644805  
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-SR4F0-125D50U935-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

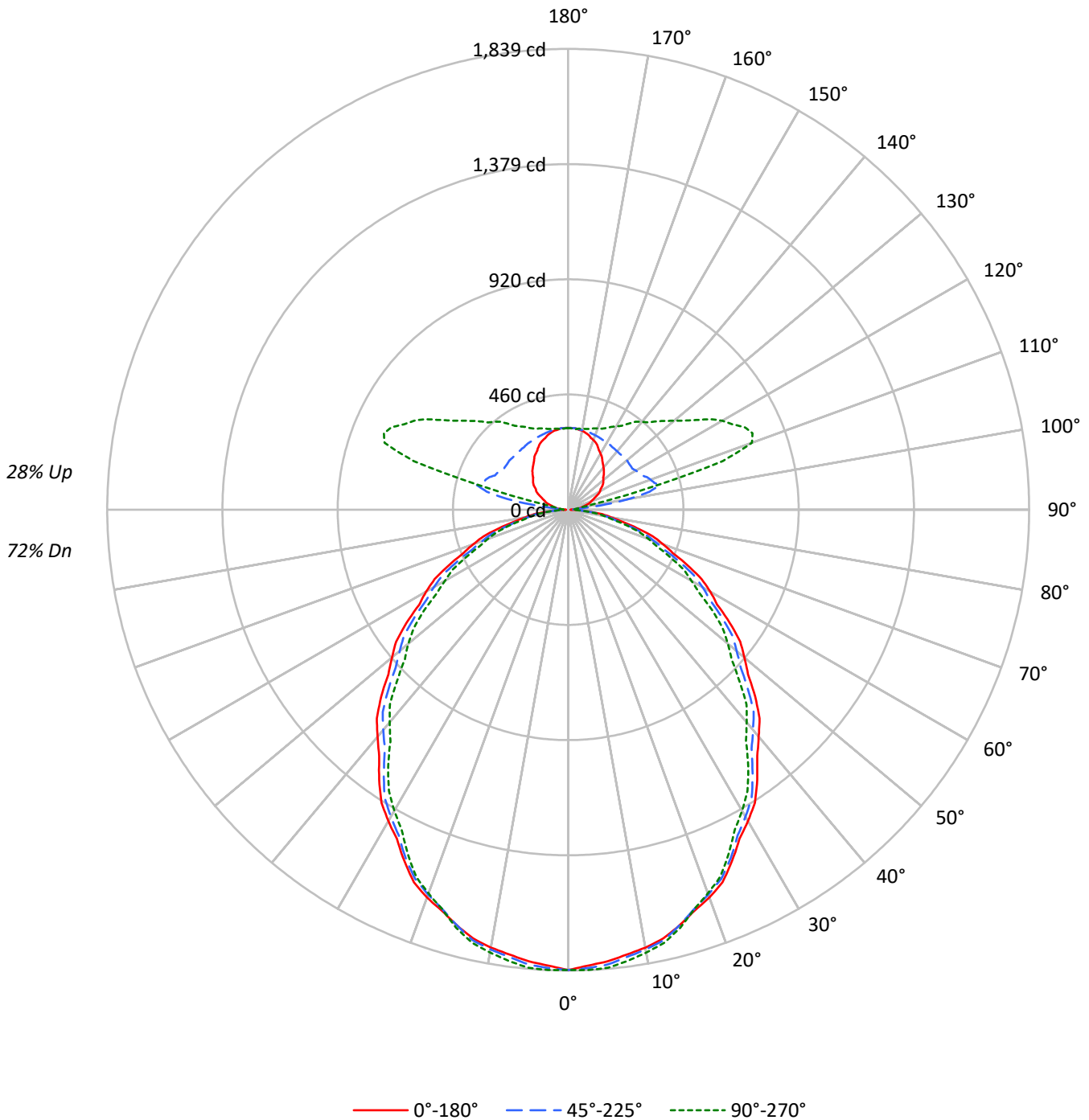
Lumens per Lamp: N/A  
Luminaire Lumens: 6233.6 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 54.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	76	76	76	72													
1	103	98	94	91	97	93	90	87	84	81	79	75	73	71	67	66	64	64	64	64	64	64	64	60													
2	94	86	80	74	88	82	76	71	74	69	65	66	63	60	59	57	54	54	54	54	54	54	54	51													
3	86	76	68	62	81	72	65	60	65	60	55	59	54	51	53	49	46	46	46	46	46	46	46	43													
4	78	67	59	53	74	64	57	51	58	52	47	52	48	44	47	43	40	40	40	40	40	40	40	37													
5	72	60	52	46	68	57	50	44	52	46	41	47	42	38	43	39	35	35	35	35	35	35	35	32													
6	67	54	46	40	63	52	44	39	47	41	36	43	38	34	39	35	31	31	31	31	31	31	31	29													
7	62	49	41	35	58	47	39	34	43	37	32	39	34	30	36	31	28	28	28	28	28	28	28	25													
8	57	45	37	31	54	43	36	30	39	33	29	36	31	27	33	28	25	25	25	25	25	25	25	23													
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	30	26	23	23	23	23	23	23	23	21													
10	50	38	30	25	48	36	29	25	33	27	23	31	26	22	28	24	21	21	21	21	21	21	21	19													

**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	2.8
10°-20°	484.9	7.8
20°-30°	705.0	11.3
30°-40°	802.0	12.9
40°-50°	781.9	12.5
50°-60°	667.5	10.7
60°-70°	485.0	7.8
70°-80°	274.3	4.4
80°-90°	85.2	1.4
90°-100°	50.8	0.8
100°-110°	291.8	4.7
110°-120°	391.7	6.3
120°-130°	317.9	5.1
130°-140°	254.2	4.1
140°-150°	200.3	3.2
150°-160°	146.4	2.3
160°-170°	90.9	1.5
170°-180°	31.0	0.5
0°-30°	1362.7	21.9
0°-40°	2164.7	34.7
0°-60°	3614.1	58.0
0°-90°	4458.6	71.5
90°-120°	734.2	11.8
90°-150°	1506.6	24.2
90°-180°	1775.0	28.5
0°-180°	6233.6	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	14	19	19	19	11
95°	36	41	24	26	28	33
105°	76	105	376	477	314	81
115°	120	142	323	665	778	120
125°	167	189	304	528	624	148
135°	201	223	304	434	499	155
145°	238	258	306	378	419	149
155°	279	289	312	343	359	128
165°	310	314	320	328	334	87
175°	326	328	326	324	322	31
180°	326	326	326	326	326	



TEST NUMBER: P644805

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U935-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	31.0	31.8	31.7	31.7
90°	10.0	14.4	19.1	18.7	18.7
92.5°	22.9	19.5	20.0	23.2	22.9
95°	36.4	40.7	23.9	26.0	27.6
97.5°	46.6	68.6	127.6	40.0	33.3
100°	56.5	83.3	247.1	73.8	49.7
102.5°	64.3	92.7	332.5	190.5	103.5
105°	76.1	105.3	376.4	476.9	313.9
107.5°	90.4	111.7	359.6	692.9	646.7
110°	98.2	119.9	349.7	728.0	779.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	108.1	129.7	339.9	707.5	796.1
115°	120.3	142.0	322.6	665.3	777.6
117.5°	135.5	156.8	318.9	622.3	737.8
120°	147.0	166.6	312.3	589.6	709.9
122.5°	153.2	176.4	304.1	561.4	672.2
125°	167.1	189.2	304.1	527.5	623.8
127.5°	176.5	200.9	304.5	488.0	583.1
130°	183.1	207.1	306.2	461.7	551.9
132.5°	189.3	213.3	304.2	449.8	524.0
135°	201.1	223.1	303.7	434.4	498.6
137.5°	211.3	235.0	303.7	417.4	472.3
140°	219.5	241.6	303.7	407.4	457.6
142.5°	227.8	248.2	305.3	395.8	442.8
145°	238.0	258.1	305.7	378.4	418.6
147.5°	250.3	268.0	308.2	365.9	396.8
150°	258.5	274.6	309.8	357.6	383.7
152.5°	266.7	281.2	309.8	350.9	372.2
155°	279.0	289.1	311.9	343.0	359.1
157.5°	288.9	298.5	314.3	338.0	349.6
160°	295.5	303.5	316.0	334.7	344.7
162.5°	300.4	308.4	317.6	333.0	339.8
165°	309.8	313.8	320.1	328.4	334.4
167.5°	315.2	318.8	322.1	326.3	329.9
170°	320.1	322.1	322.1	326.3	328.3
172.5°	321.7	325.3	323.8	324.6	326.7
175°	326.2	328.2	326.2	324.1	322.1
177.5°	326.2	327.8	326.2	326.2	324.6
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)