

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: P644790

Luminaire Tested: OMN4DIP-SR4F0-125D50U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644790
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-SR4F0-125D50U835-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

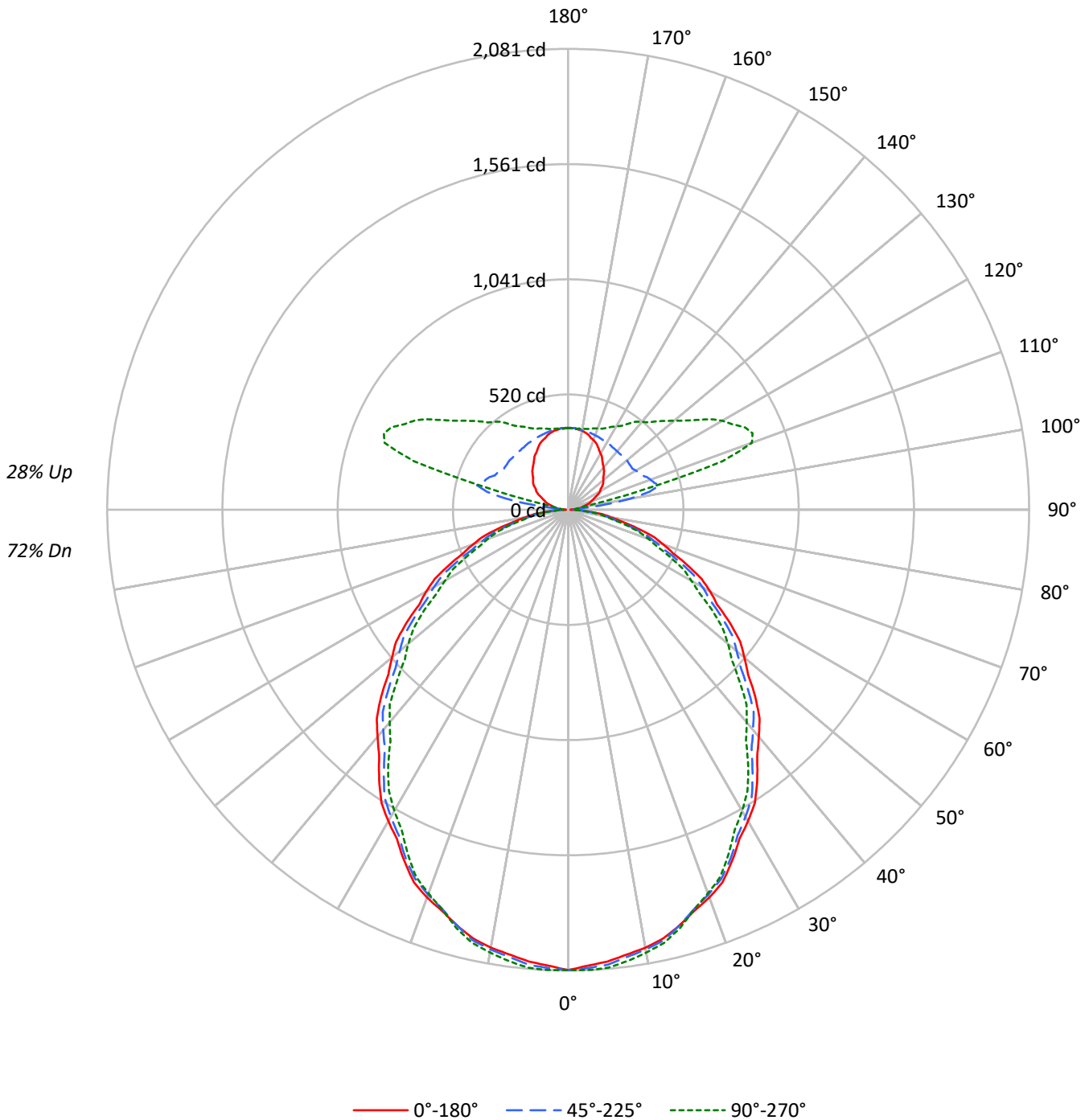
Lumens per Lamp: N/A
Luminaire Lumens: 7054.4 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 54.6
Input Voltage (V): 120
Input Current (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									
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°	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	2.8
10°-20°	548.7	7.8
20°-30°	797.9	11.3
30°-40°	907.6	12.9
40°-50°	884.9	12.5
50°-60°	755.3	10.7
60°-70°	548.9	7.8
70°-80°	310.4	4.4
80°-90°	96.4	1.4
90°-100°	57.4	0.8
100°-110°	330.2	4.7
110°-120°	443.2	6.3
120°-130°	359.8	5.1
130°-140°	287.7	4.1
140°-150°	226.6	3.2
150°-160°	165.7	2.3
160°-170°	102.9	1.5
170°-180°	35.1	0.5
0°-30°	1542.1	21.9
0°-40°	2449.7	34.7
0°-60°	4089.9	58.0
0°-90°	5045.6	71.5
90°-120°	830.9	11.8
90°-150°	1705.0	24.2
90°-180°	2009.0	28.5
0°-180°	7054.4	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	16	22	21	21	12
95°	41	46	27	29	31	38
105°	86	119	426	540	355	92
115°	136	161	365	753	880	136
125°	189	214	344	597	706	168
135°	228	252	344	492	564	175
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	

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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	35.1	36.0	35.9	35.9
90°	11.3	16.3	21.6	21.1	21.1
92.5°	25.9	22.1	22.7	26.3	25.9
95°	41.2	46.0	27.1	29.4	31.2
97.5°	52.8	77.6	144.5	45.3	37.7
100°	63.9	94.2	279.7	83.5	56.2
102.5°	72.8	104.9	376.2	215.6	117.1
105°	86.1	119.2	425.9	539.7	355.3
107.5°	102.3	126.4	406.9	784.1	731.9
110°	111.2	135.6	395.7	823.8	882.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	122.3	146.8	384.6	800.6	900.9
115°	136.2	160.7	365.1	752.9	880.0
117.5°	153.4	177.4	360.9	704.2	835.0
120°	166.4	188.6	353.4	667.2	803.4
122.5°	173.4	199.6	344.2	635.4	760.7
125°	189.1	214.1	344.2	596.9	705.9
127.5°	199.7	227.4	344.6	552.3	659.9
130°	207.2	234.4	346.5	522.4	624.6
132.5°	214.2	241.4	344.2	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2

(END OF REPORT)