

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: P644811

Luminaire Tested: OMN4DIP-SR4F0-125D50U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644811
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-SR4F0-125D50U940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

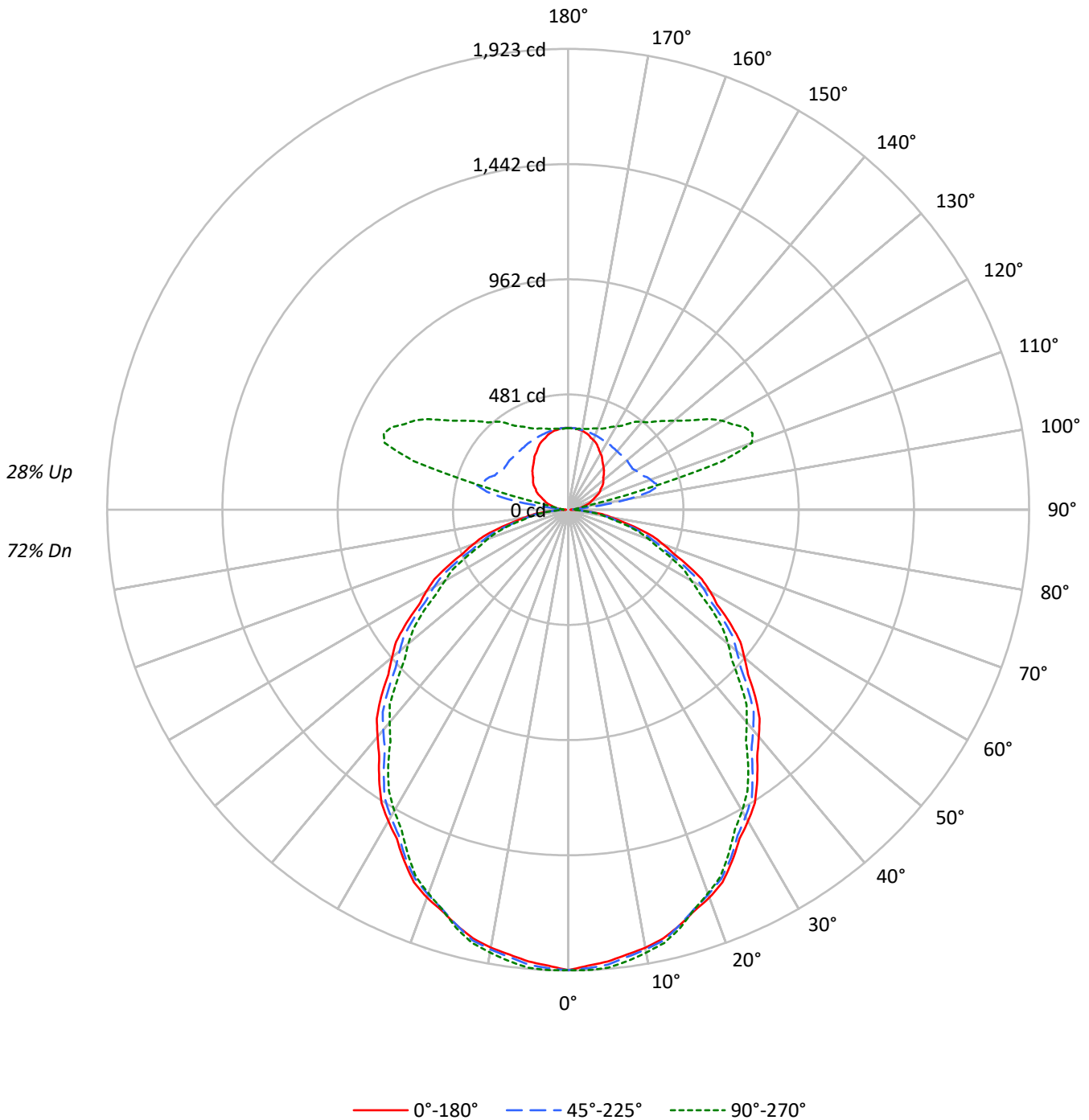
Lumens per Lamp: N/A
Luminaire Lumens: 6519.4 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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

TEST NUMBER: P644811

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U940-FLLOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644811

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U940-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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	91	97	93	90	87	84	81	79	75	73	71	67	66	64	60
2	94	86	80	74	88	82	76	71	74	69	65	66	63	60	59	57	54	51
3	86	76	68	62	81	72	65	60	65	60	55	59	54	51	53	49	46	43
4	78	67	59	53	74	64	57	51	58	52	47	52	48	44	47	43	40	37
5	72	60	52	46	68	57	50	44	52	46	41	47	42	38	43	39	35	32
6	67	54	46	40	63	52	44	39	47	41	36	43	38	34	39	35	31	29
7	62	49	41	35	58	47	39	34	43	37	32	39	34	30	36	31	28	25
8	57	45	37	31	54	43	36	30	39	33	29	36	31	27	33	28	25	23
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	30	26	23	21
10	50	38	30	25	48	36	29	25	33	27	23	31	26	22	28	24	21	19

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



TEST NUMBER: P644811

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U940-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.7	2.8
10°-20°	507.1	7.8
20°-30°	737.3	11.3
30°-40°	838.7	12.9
40°-50°	817.8	12.5
50°-60°	698.1	10.7
60°-70°	507.3	7.8
70°-80°	286.9	4.4
80°-90°	89.1	1.4
90°-100°	53.1	0.8
100°-110°	305.1	4.7
110°-120°	409.6	6.3
120°-130°	332.5	5.1
130°-140°	265.9	4.1
140°-150°	209.4	3.2
150°-160°	153.1	2.3
160°-170°	95.1	1.5
170°-180°	32.4	0.5
0°-30°	1425.2	21.9
0°-40°	2263.9	34.7
0°-60°	3779.8	58.0
0°-90°	4663.0	71.5
90°-120°	767.9	11.8
90°-150°	1575.7	24.2
90°-180°	1856.0	28.5
0°-180°	6519.4	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	15	20	20	20	11
95°	38	42	25	27	29	35
105°	80	110	394	499	328	85
115°	126	148	337	696	813	126
125°	175	198	318	552	652	155
135°	210	233	318	454	522	162
145°	249	270	320	396	438	156
155°	292	302	326	359	376	134
165°	324	328	335	344	350	91
175°	341	343	341	339	337	32
180°	341	341	341	341	341	

TEST NUMBER: P644811

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U940-FLLOOB-1DUDD-WW

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	32.4	33.3	33.2	33.2
90°	10.5	15.1	20.0	19.5	19.5
92.5°	24.0	20.4	20.9	24.3	23.9
95°	38.1	42.5	25.0	27.2	28.8
97.5°	48.8	71.7	133.5	41.9	34.8
100°	59.1	87.1	258.4	77.1	52.0
102.5°	67.3	97.0	347.7	199.3	108.2
105°	79.6	110.2	393.6	498.7	328.3
107.5°	94.5	116.8	376.0	724.7	676.4
110°	102.7	125.4	365.7	761.3	815.4



TEST NUMBER: P644811

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U940-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	113.0	135.7	355.4	739.9	832.6
115°	125.9	148.5	337.4	695.8	813.3
117.5°	141.7	163.9	333.5	650.8	771.7
120°	153.8	174.3	326.6	616.6	742.5
122.5°	160.3	184.5	318.1	587.2	703.0
125°	174.8	197.8	318.1	551.6	652.4
127.5°	184.6	210.1	318.5	510.4	609.9
130°	191.5	216.6	320.2	482.8	577.2
132.5°	197.9	223.1	318.1	470.4	548.1
135°	210.3	233.4	317.6	454.3	521.5
137.5°	221.0	245.8	317.6	436.5	494.0
140°	229.6	252.7	317.6	426.1	478.5
142.5°	238.2	259.6	319.3	414.0	463.1
145°	248.9	269.9	319.7	395.8	437.8
147.5°	261.8	280.3	322.3	382.7	415.0
150°	270.4	287.2	324.0	374.0	401.3
152.5°	279.0	294.1	324.0	367.0	389.3
155°	291.8	302.3	326.2	358.7	375.5
157.5°	302.1	312.2	328.8	353.5	365.7
160°	309.0	317.4	330.5	350.0	360.5
162.5°	314.2	322.6	332.2	348.2	355.4
165°	324.0	328.2	334.8	343.5	349.8
167.5°	329.6	333.4	336.9	341.3	345.1
170°	334.8	336.9	336.9	341.2	343.3
172.5°	336.5	340.3	338.6	339.5	341.6
175°	341.2	343.3	341.2	339.0	336.9
177.5°	341.2	342.9	341.2	341.2	339.5
180°	341.2	341.2	341.2	341.2	341.2

(END OF REPORT)