

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: P644794

Luminaire Tested: OMN4DIP-SR4F0-125D50U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644794
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-SR4F0-125D50U840-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

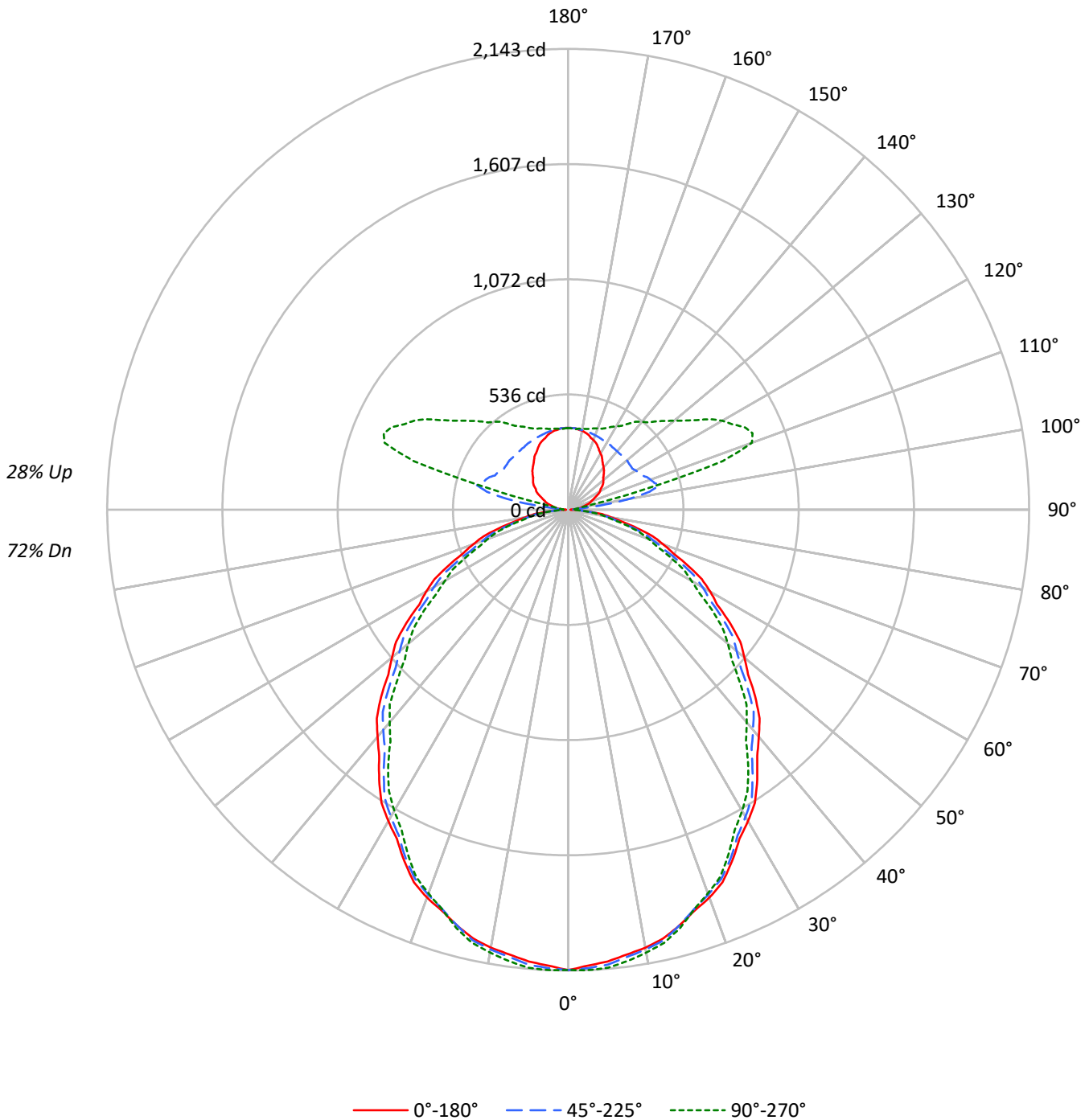
Lumens per Lamp: N/A
Luminaire Lumens: 7264.6 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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: P644794

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U840-FLLOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644794

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U840-FLLOOB-1DUDD-WW

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°	34563	34563	34563
5°	34175	34412	34647
10°	33901	34046	34283
15°	33446	33446	33640
20°	32977	32727	32627
25°	32117	31857	31442
30°	31167	30732	30136
35°	30194	29449	28759
40°	29036	28176	27193
45°	28065	27001	25670
50°	26849	25679	24360
55°	25824	24513	23037
60°	24642	23324	21348
65°	23366	21696	20027
70°	22135	20073	18699
75°	20711	18353	17442
80°	18959	16792	15974
85°	17803	15654	14561

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 28065 cd/sqm



TEST NUMBER: P644794

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U840-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.4	2.8
10°-20°	565.1	7.8
20°-30°	821.6	11.3
30°-40°	934.6	12.9
40°-50°	911.3	12.5
50°-60°	777.9	10.7
60°-70°	565.3	7.8
70°-80°	319.7	4.4
80°-90°	99.3	1.4
90°-100°	59.1	0.8
100°-110°	340.0	4.7
110°-120°	456.5	6.3
120°-130°	370.5	5.1
130°-140°	296.3	4.1
140°-150°	233.4	3.2
150°-160°	170.7	2.3
160°-170°	106.0	1.5
170°-180°	36.1	0.5
0°-30°	1588.1	21.9
0°-40°	2522.7	34.7
0°-60°	4211.8	58.0
0°-90°	5196.0	71.5
90°-120°	855.6	11.8
90°-150°	1755.8	24.2
90°-180°	2069.0	28.5
0°-180°	7264.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2141	2141	2141	2141	2141	
5°	2109	2140	2123	2121	2138	200
15°	2001	2026	2001	1998	2012	564
25°	1803	1820	1788	1756	1765	829
35°	1532	1538	1494	1459	1459	957
45°	1229	1223	1182	1141	1124	946
55°	917	915	871	830	818	819
65°	612	606	568	533	524	607
75°	332	321	294	282	280	352
85°	96	85	84	82	79	103
90°	12	17	22	22	22	13
95°	42	47	28	30	32	39
105°	89	123	439	556	366	95
115°	140	166	376	775	906	140
125°	195	220	354	615	727	173
135°	234	260	354	506	581	181
145°	277	301	356	441	488	174
155°	325	337	364	400	418	149
165°	361	366	373	383	390	101
175°	380	382	380	378	375	36
180°	380	380	380	380	380	



TEST NUMBER: P644794

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U840-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2140.7	2140.7	2140.7	2140.7	2140.7
2.5°	2122.0	2149.3	2133.7	2133.9	2143.0
5°	2108.6	2139.9	2123.2	2120.7	2137.7
7.5°	2086.5	2117.2	2097.5	2094.6	2116.8
10°	2067.8	2096.3	2076.6	2071.2	2091.1
12.5°	2042.2	2070.7	2050.9	2043.2	2063.2
15°	2000.9	2026.5	2000.9	1998.3	2012.5
17.5°	1954.3	1976.5	1946.7	1937.0	1947.8
20°	1919.3	1939.2	1904.7	1890.4	1898.9
22.5°	1875.0	1895.0	1858.1	1836.8	1847.7
25°	1802.8	1819.9	1788.2	1756.4	1764.9
27.5°	1725.3	1738.4	1706.7	1674.1	1677.0
30°	1671.7	1680.3	1648.4	1613.6	1616.4
32.5°	1615.8	1622.1	1587.9	1550.6	1551.2
35°	1531.9	1537.6	1494.1	1459.1	1459.1
37.5°	1442.8	1446.2	1399.7	1361.8	1357.8
40°	1377.6	1383.3	1336.8	1298.8	1290.2
42.5°	1317.0	1318.1	1276.2	1238.1	1227.3
45°	1229.1	1223.4	1182.5	1141.3	1124.2
47.5°	1134.1	1134.1	1087.5	1046.4	1030.4
50°	1068.9	1068.9	1022.3	981.2	969.8
52.5°	1008.3	1006.0	961.7	920.6	904.6
55°	917.4	914.6	870.8	829.8	818.4
57.5°	821.3	821.3	780.5	736.6	724.0
60°	763.1	763.1	722.3	678.2	661.1
62.5°	700.2	697.9	657.0	617.8	607.5
65°	611.6	605.9	567.9	532.8	524.2
67.5°	527.2	521.5	481.1	453.0	447.4
70°	468.9	463.2	425.2	401.8	396.1
72.5°	413.0	405.0	371.6	352.9	347.2
75°	332.0	320.6	294.2	282.4	279.6
77.5°	255.1	235.8	224.8	216.6	213.8
80°	203.9	186.8	180.6	174.7	171.8
82.5°	159.6	142.5	141.0	137.4	134.6
85°	96.1	84.7	84.5	81.5	78.6
87.5°	41.9	36.1	37.1	37.0	37.0
90°	11.6	16.8	22.3	21.7	21.7
92.5°	26.7	22.8	23.3	27.0	26.6
95°	42.4	47.4	27.9	30.3	32.1
97.5°	54.3	79.9	148.8	46.7	38.8
100°	65.8	97.0	288.0	86.0	57.9
102.5°	75.0	108.0	387.5	222.0	120.6
105°	88.7	122.7	438.6	555.7	365.9
107.5°	105.3	130.1	419.0	807.5	753.7
110°	114.5	139.7	407.5	848.4	908.7



TEST NUMBER: P644794

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U840-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.9	151.2	396.1	824.5	927.8
115°	140.3	165.5	375.9	775.3	906.3
117.5°	157.9	182.7	371.6	725.2	859.9
120°	171.3	194.2	364.0	687.1	827.4
122.5°	178.6	205.6	354.4	654.3	783.4
125°	194.7	220.4	354.4	614.7	726.9
127.5°	205.7	234.2	354.9	568.8	679.6
130°	213.3	241.4	356.8	538.0	643.2
132.5°	220.6	248.6	354.5	524.2	610.7
135°	234.3	260.1	353.9	506.2	581.1
137.5°	246.3	273.9	353.9	486.4	550.5
140°	255.9	281.6	353.9	474.8	533.2
142.5°	265.4	289.3	355.8	461.3	516.0
145°	277.4	300.8	356.3	441.0	487.8
147.5°	291.7	312.3	359.2	426.5	462.5
150°	301.3	320.0	361.1	416.8	447.2
152.5°	310.9	327.7	361.1	409.0	433.8
155°	325.2	336.9	363.5	399.8	418.5
157.5°	336.7	347.9	366.3	393.9	407.5
160°	344.3	353.7	368.2	390.0	401.7
162.5°	350.1	359.4	370.2	388.0	396.0
165°	361.1	365.7	373.0	382.8	389.8
167.5°	367.3	371.5	375.4	380.3	384.5
170°	373.0	375.4	375.4	380.3	382.6
172.5°	374.9	379.1	377.3	378.3	380.7
175°	380.2	382.5	380.2	377.8	375.4
177.5°	380.2	382.1	380.2	380.2	378.3
180°	380.2	380.2	380.2	380.2	380.2

(END OF REPORT)