

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: P644704

Luminaire Tested: OMN4DIP-SR4F0-125D125U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644704
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-SR4F0-125D125U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

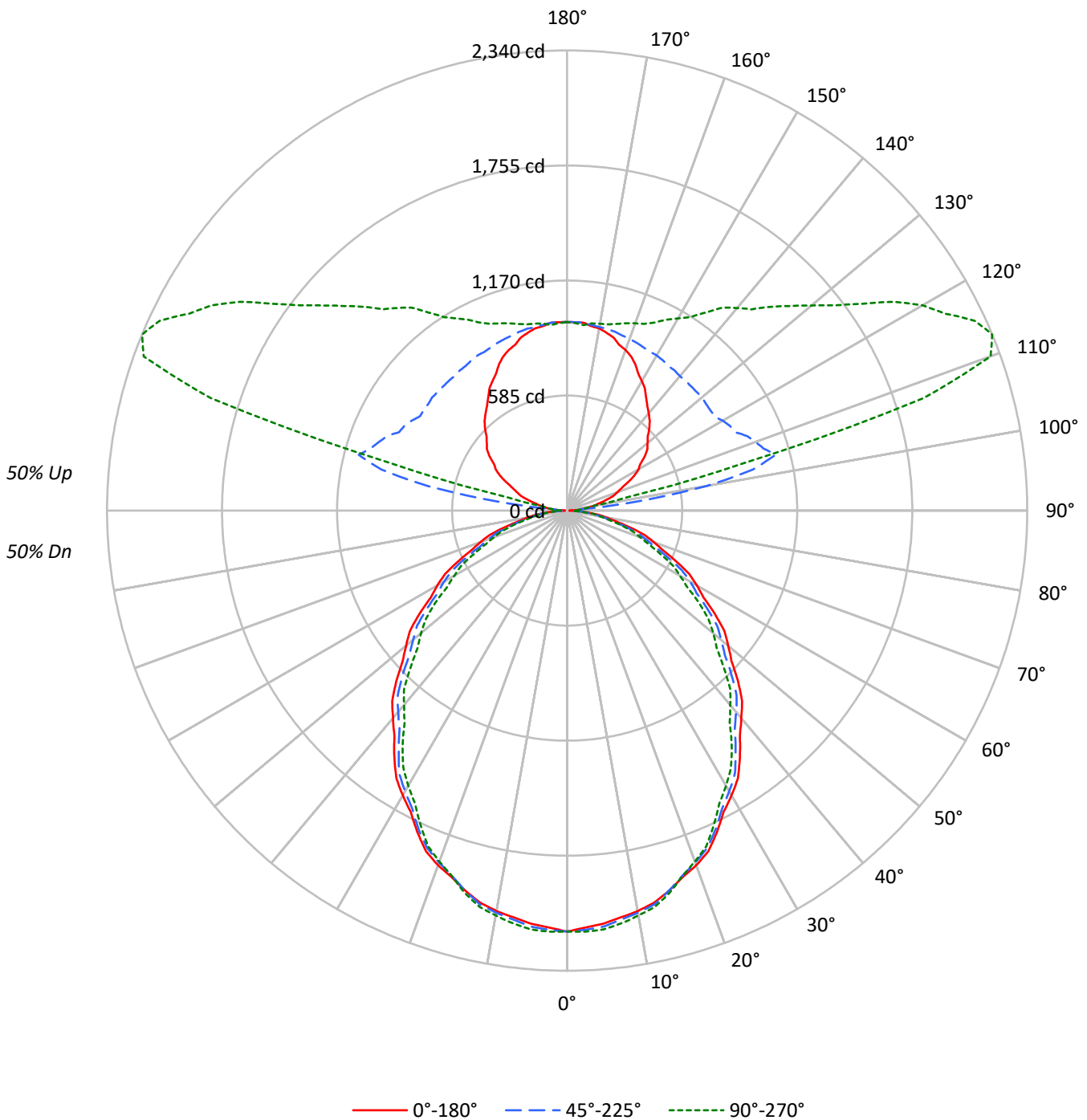
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10374.1 lumens
Efficiency: N/A
Efficacy: 132.7 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: General Diffuse

Input Watts (W): 78.2
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					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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42				
2	89	82	76	71	82	76	70	66	64	60	57	54	51	48	44	42	40	36				
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	39	37	34	30				
4	75	64	56	50	69	59	52	47	51	45	41	42	38	35	35	32	30	26				
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	32	28	26	23				
6	63	51	43	37	58	48	40	35	41	35	31	35	30	27	29	25	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16				
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	22	19	17	14				
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	17	15	13				

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



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CATALOG NUMBER: OMN4DIP-SR4F0-125D125U840-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.4	1.9
10°-20°	565.1	5.4
20°-30°	821.6	7.9
30°-40°	934.6	9.0
40°-50°	911.3	8.8
50°-60°	777.9	7.5
60°-70°	565.3	5.4
70°-80°	319.7	3.1
80°-90°	100.6	1.0
90°-100°	130.3	1.3
100°-110°	847.0	8.2
110°-120°	1144.7	11.0
120°-130°	930.7	9.0
130°-140°	746.8	7.2
140°-150°	588.6	5.7
150°-160°	430.4	4.1
160°-170°	267.3	2.6
170°-180°	91.2	0.9
0°-30°	1588.1	15.3
0°-40°	2522.7	24.3
0°-60°	4211.8	40.6
0°-90°	5197.4	50.1
90°-120°	2122.0	20.5
90°-150°	4388.0	42.3
90°-180°	5177.0	49.9
0°-180°	10374.1	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	20	30	33	33	14
95°	72	101	57	63	72	71
105°	202	296	1097	1397	923	214
115°	340	408	944	1955	2286	339
125°	482	547	889	1550	1833	428
135°	591	656	892	1277	1465	455
145°	700	758	898	1112	1230	439
155°	820	850	917	1008	1055	376
165°	911	922	941	965	983	256
175°	959	965	959	953	947	91
180°	959	959	959	959	959	

TEST NUMBER: P644704

CATALOG NUMBER: OMN4DIP-SR4F0-125D125U840-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	36.9	38.5	39.2	39.2
90°	11.6	20.4	29.5	32.7	32.7
92.5°	35.4	35.1	39.3	49.7	52.1
95°	71.5	101.4	57.0	63.2	72.2
97.5°	106.0	183.6	362.7	109.8	93.4
100°	135.0	226.7	717.4	212.4	141.6
102.5°	161.6	258.0	968.3	555.6	303.3
105°	201.5	296.0	1097.3	1397.2	922.6
107.5°	244.3	314.7	1047.9	2032.1	1900.7
110°	271.0	338.9	1018.9	2135.1	2291.5



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CATALOG NUMBER: OMN4DIP-SR4F0-125D125U840-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	299.9	367.8	990.0	2074.9	2339.7
115°	340.4	408.3	943.6	1955.3	2285.5
117.5°	385.0	451.8	932.8	1828.9	2168.5
120°	418.8	480.8	913.5	1732.7	2086.5
122.5°	440.6	509.6	889.4	1650.0	1975.5
125°	482.2	547.1	889.4	1550.2	1833.2
127.5°	514.3	582.6	890.6	1434.3	1713.8
130°	533.6	604.3	895.4	1356.8	1622.1
132.5°	555.4	626.1	893.1	1322.0	1540.1
135°	591.0	655.8	892.5	1276.7	1465.4
137.5°	621.1	690.7	892.5	1226.6	1388.2
140°	645.2	710.1	892.5	1197.3	1344.7
142.5°	669.4	729.5	897.3	1163.4	1301.3
145°	699.5	758.5	898.5	1112.2	1230.2
147.5°	735.7	787.6	905.7	1075.5	1166.3
150°	759.8	807.0	910.6	1051.0	1127.7
152.5°	783.9	826.4	910.6	1031.4	1093.9
155°	820.1	849.6	916.6	1008.1	1055.3
157.5°	849.1	877.4	923.8	993.4	1027.6
160°	868.4	891.9	928.7	983.6	1013.1
162.5°	882.8	906.4	933.5	978.6	998.6
165°	910.6	922.4	940.7	965.2	982.9
167.5°	926.2	936.9	946.8	959.1	969.7
170°	940.7	946.6	946.8	958.9	964.8
172.5°	945.5	956.2	951.6	954.1	960.0
175°	958.8	964.7	958.8	952.6	946.8
177.5°	958.8	963.5	958.8	958.7	954.0
180°	958.8	958.8	958.8	958.8	958.8

(END OF REPORT)