

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: P644734

Luminaire Tested: OMN4DIP-SR4F0-125D150U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644734
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-SR4F0-125D150U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

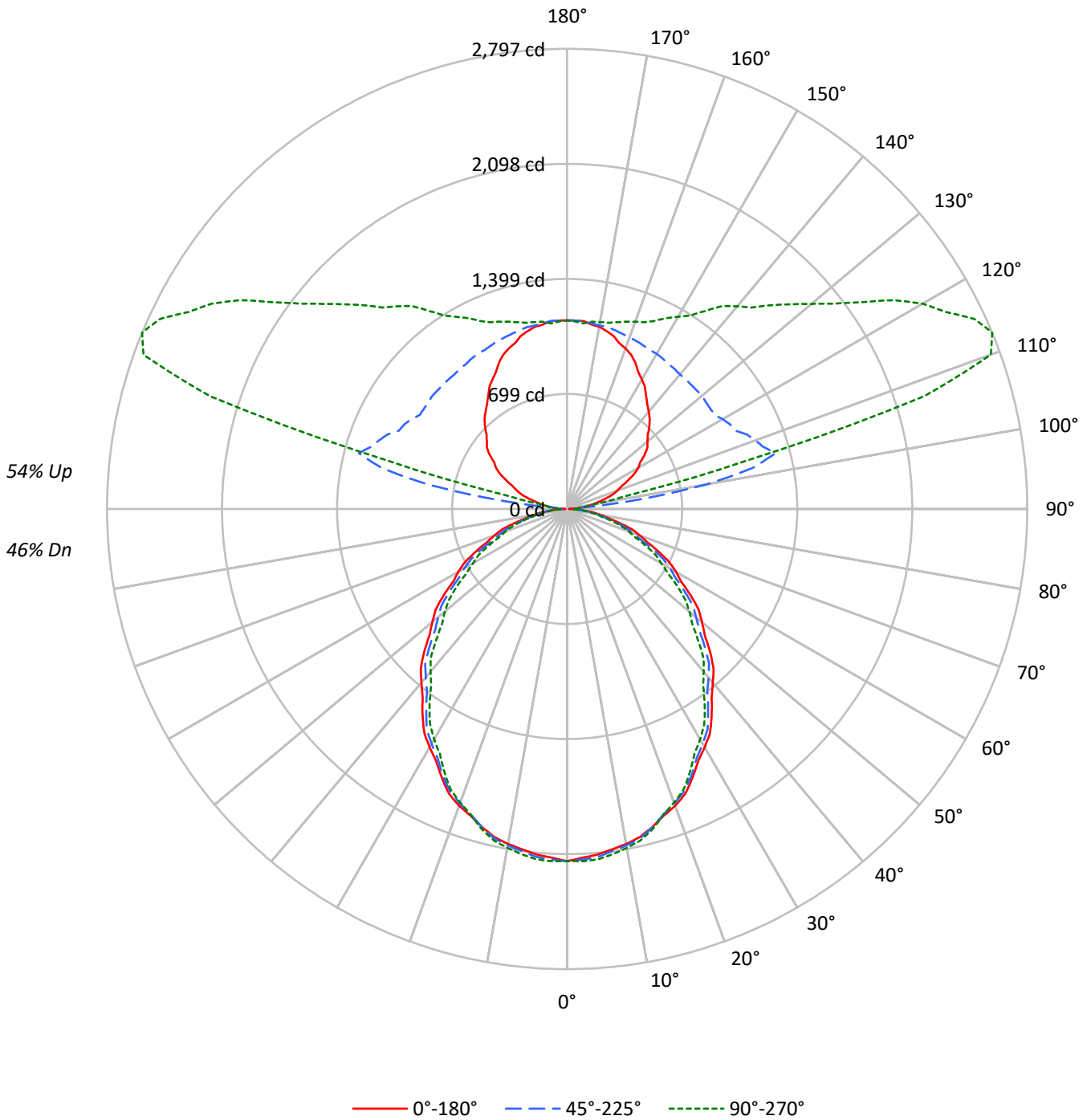
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11381.6 lumens
Efficiency: N/A
Efficacy: 128.5 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): 88.6
Input Voltage (V): 120
Input Current (A_{in}): 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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46				46
1	97	93	89	85	89	85	82	79	71	69	67	58	56	55	46	45	44				39	
2	88	81	75	70	81	74	69	65	62	58	55	51	48	46	41	39	37				32	
3	81	71	64	58	74	66	59	54	55	50	47	45	42	39	36	34	32				28	
4	74	63	55	49	67	58	51	46	49	44	40	40	37	34	32	30	28				24	
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24				21	
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	21				18	
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19				16	
8	54	41	34	28	49	38	32	27	33	27	23	27	23	20	22	19	17				15	
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15				13	
10	47	35	27	23	43	32	26	21	28	22	19	23	19	16	19	16	14				12	

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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.4	1.8
10°-20°	565.1	5.0
20°-30°	821.6	7.2
30°-40°	934.6	8.2
40°-50°	911.3	8.0
50°-60°	777.9	6.8
60°-70°	565.3	5.0
70°-80°	319.7	2.8
80°-90°	101.0	0.9
90°-100°	153.4	1.3
100°-110°	1011.2	8.9
110°-120°	1367.7	12.0
120°-130°	1112.1	9.8
130°-140°	892.8	7.8
140°-150°	703.6	6.2
150°-160°	514.5	4.5
160°-170°	319.6	2.8
170°-180°	109.0	1.0
0°-30°	1588.1	14.0
0°-40°	2522.7	22.2
0°-60°	4211.8	37.0
0°-90°	5197.8	45.7
90°-120°	2532.2	22.2
90°-150°	5240.8	46.0
90°-180°	6184.0	54.3
0°-180°	11381.6	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	22	32	36	36	14
95°	81	119	66	74	85	82
105°	238	352	1311	1670	1103	252
115°	405	487	1128	2338	2732	403
125°	575	653	1063	1853	2192	511
135°	706	784	1067	1526	1752	544
145°	836	907	1074	1330	1471	525
155°	980	1016	1096	1205	1262	450
165°	1089	1103	1125	1154	1175	306
175°	1146	1153	1146	1139	1132	108
180°	1146	1146	1146	1146	1146	

TEST NUMBER: P644734

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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	37.1	39.0	39.9	39.9
90°	11.6	21.5	31.9	36.2	36.2
92.5°	38.3	39.1	44.5	57.0	60.4
95°	81.0	118.9	66.4	73.9	85.1
97.5°	122.8	217.1	432.1	130.2	111.1
100°	157.4	268.7	856.5	253.3	168.7
102.5°	189.6	306.6	1156.4	663.7	362.5
105°	238.1	352.2	1310.7	1669.8	1103.0
107.5°	289.4	374.5	1251.6	2428.9	2272.4
110°	321.7	403.4	1217.0	2552.1	2739.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	356.3	438.0	1182.4	2480.0	2797.2
115°	405.3	487.0	1127.6	2337.6	2732.3
117.5°	458.6	538.9	1114.6	2186.4	2592.5
120°	499.0	573.7	1091.5	2071.5	2494.4
122.5°	525.5	608.1	1062.7	1972.7	2361.8
125°	575.4	652.9	1062.7	1853.3	2191.6
127.5°	614.3	695.5	1064.1	1714.8	2048.9
130°	637.3	721.9	1069.9	1622.1	1939.3
132.5°	663.8	748.4	1067.6	1580.4	1841.3
135°	706.5	784.1	1067.0	1526.3	1751.9
137.5°	742.6	825.7	1067.0	1466.4	1659.6
140°	771.4	848.9	1067.0	1431.5	1607.7
142.5°	800.2	872.1	1072.7	1390.8	1555.8
145°	836.3	906.8	1074.2	1329.7	1470.7
147.5°	879.5	941.6	1082.8	1285.7	1394.3
150°	908.4	964.8	1088.6	1256.5	1348.1
152.5°	937.2	988.0	1088.6	1233.1	1307.8
155°	980.5	1015.7	1095.8	1205.2	1261.6
157.5°	1015.1	1048.9	1104.5	1187.6	1228.5
160°	1038.1	1066.3	1110.2	1175.9	1211.2
162.5°	1055.4	1083.6	1116.0	1169.9	1193.9
165°	1088.6	1102.7	1124.7	1154.0	1175.1
167.5°	1107.4	1120.0	1131.9	1146.6	1159.3
170°	1124.7	1131.7	1131.9	1146.4	1153.5
172.5°	1130.4	1143.1	1137.6	1140.7	1147.7
175°	1146.3	1153.3	1146.3	1138.9	1131.9
177.5°	1146.3	1151.9	1146.3	1146.2	1140.5
180°	1146.3	1146.3	1146.3	1146.3	1146.3

(END OF REPORT)