

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: P644719

Luminaire Tested: OMN4DIP-SR4F0-125D125U940-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644719
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-125D125U940-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

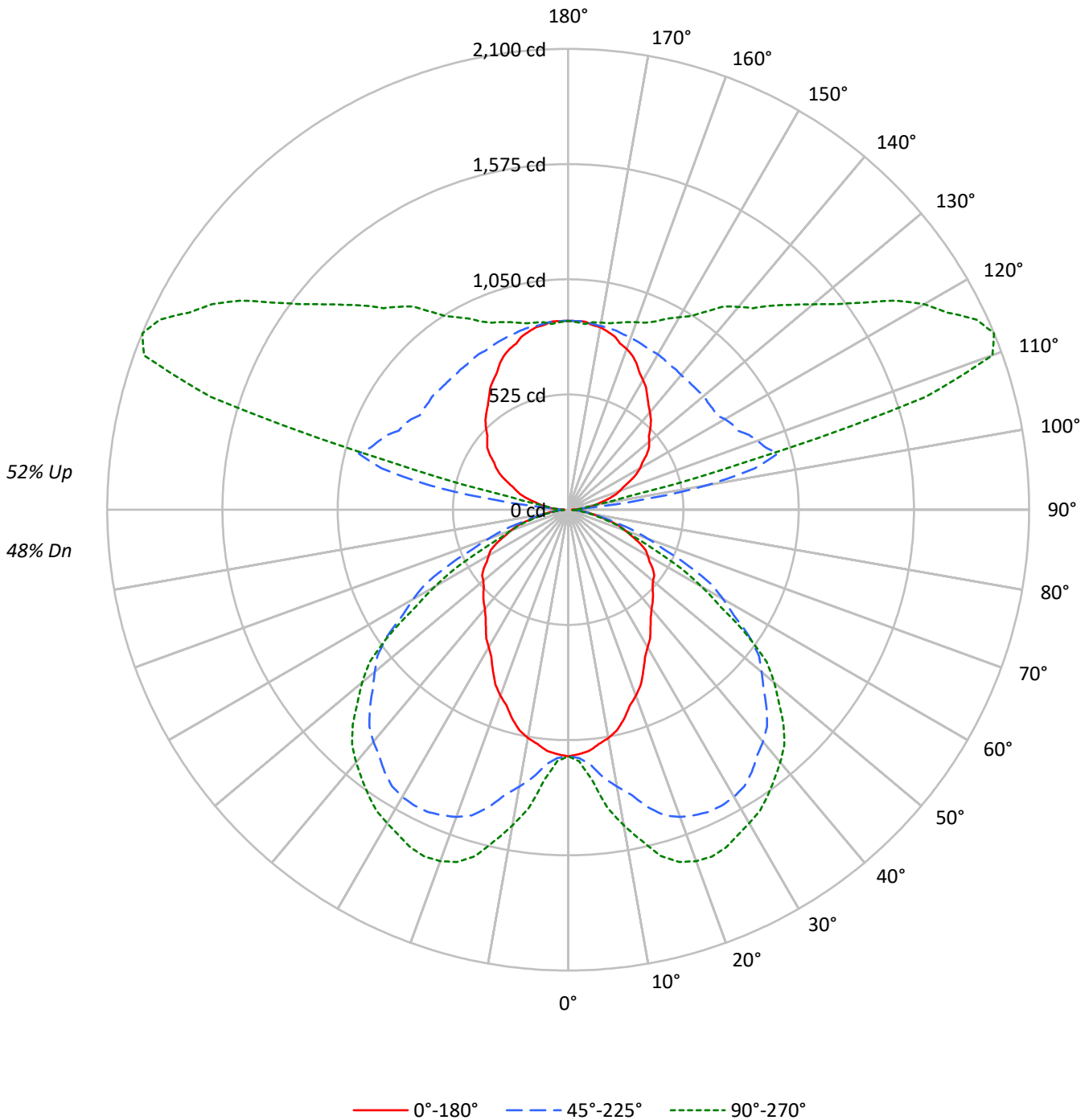
Lumens per Lamp: N/A
Luminaire Lumens: 8970.9 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48	
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41	41	41	41	
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	41	39	34	34	34	34	
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33	29	29	29	29	
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	31	28	24	24	24	24	
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24	21	21	21	21	
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21	18	18	18	18	
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	24	21	19	16	16	16	16	
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14	14	14	14	
9	49	37	30	24	45	35	28	23	30	24	20	25	21	18	21	17	15	13	13	13	13	
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	11	11	11	11	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18146	18146	18146
5°	17877	18893	19995
10°	17311	20997	23953
15°	16471	23460	27305
20°	15493	25598	29280
25°	14434	27052	30266
30°	13498	28165	30747
35°	12879	28746	31271
40°	12450	29086	31676
45°	12474	29184	31691
50°	12670	28886	30790
55°	13244	28327	27958
60°	13504	26334	22704
65°	13681	23068	16676
70°	13076	18137	12954
75°	11740	13531	10923
80°	9967	10693	8749
85°	9689	8707	7262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 31691 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.3
10°-20°	383.0	4.3
20°-30°	636.4	7.1
30°-40°	802.8	8.9
40°-50°	858.2	9.6
50°-60°	757.4	8.4
60°-70°	486.1	5.4
70°-80°	215.6	2.4
80°-90°	57.8	0.6
90°-100°	120.5	1.3
100°-110°	763.3	8.5
110°-120°	1030.6	11.5
120°-130°	837.5	9.3
130°-140°	670.4	7.5
140°-150°	528.2	5.9
150°-160°	386.2	4.3
160°-170°	239.9	2.7
170°-180°	81.8	0.9
0°-30°	1134.7	12.6
0°-40°	1937.4	21.6
0°-60°	3553.0	39.6
0°-90°	4312.5	48.1
90°-120°	1914.3	21.3
90°-150°	3950.5	44.0
90°-180°	4658.0	51.9
0°-180°	8970.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1124	1124	1124	1124	1124	
5°	1103	1136	1166	1206	1234	104
15°	985	1136	1404	1572	1634	276
25°	810	1099	1518	1661	1699	373
35°	653	1004	1458	1553	1586	410
45°	546	858	1278	1357	1388	422
55°	470	675	1006	1011	993	417
65°	358	453	604	490	436	350
75°	188	209	217	185	175	201
85°	52	45	47	42	39	55
90°	18	24	26	32	27	14
95°	72	99	56	57	65	70
105°	186	274	987	1254	828	197
115°	311	372	852	1757	2051	309
125°	435	494	803	1394	1645	387
135°	530	588	801	1146	1315	409
145°	628	681	806	998	1104	394
155°	736	762	823	905	947	338
165°	817	828	844	866	882	229
175°	860	866	860	855	850	81
180°	860	860	860	860	860	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1123.9	1123.9	1123.9	1123.9	1123.9
2.5°	1115.5	1131.9	1132.2	1138.7	1146.9
5°	1103.0	1136.2	1165.7	1205.5	1233.7
7.5°	1076.8	1136.1	1230.5	1323.0	1369.0
10°	1055.9	1137.7	1280.7	1404.8	1461.0
12.5°	1028.7	1137.1	1330.9	1480.3	1544.7
15°	985.4	1136.1	1403.5	1572.2	1633.5
17.5°	935.2	1131.4	1460.5	1629.5	1683.2
20°	901.7	1126.6	1489.8	1650.4	1704.1
22.5°	864.1	1115.5	1506.5	1660.8	1710.4
25°	810.2	1099.0	1518.5	1660.6	1698.9
27.5°	757.4	1075.4	1519.1	1639.5	1672.2
30°	724.0	1056.2	1510.7	1618.6	1649.2
32.5°	694.7	1035.1	1494.0	1593.5	1626.2
35°	653.4	1003.5	1458.4	1553.3	1586.5
37.5°	617.9	967.5	1413.5	1505.8	1544.7
40°	590.7	938.3	1380.0	1472.2	1502.9
42.5°	569.8	907.1	1340.3	1430.3	1456.9
45°	546.3	858.0	1278.1	1357.2	1387.9
47.5°	521.2	807.4	1206.5	1281.2	1301.1
50°	504.4	770.2	1150.0	1218.1	1225.8
52.5°	494.0	731.1	1095.7	1138.6	1140.1
55°	470.5	674.9	1006.3	1011.1	993.2
57.5°	439.1	609.3	892.8	867.3	824.4
60°	418.2	563.9	815.5	764.4	703.1
62.5°	397.3	520.5	733.9	651.3	579.7
65°	358.1	452.6	603.8	490.2	436.5
67.5°	312.6	378.0	474.1	366.7	330.9
70°	277.0	328.2	384.2	300.0	274.4
72.5°	243.6	278.4	311.0	248.0	234.7
75°	188.2	208.6	216.9	185.3	175.1
77.5°	138.5	139.5	150.5	130.6	125.5
80°	107.2	102.0	115.0	99.2	94.1
82.5°	82.1	74.9	83.6	72.1	69.0
85°	52.3	44.6	47.0	41.8	39.2
87.5°	30.8	25.8	26.2	25.1	22.1
90°	18.3	23.6	26.5	31.8	26.7
92.5°	37.6	36.7	37.4	45.0	44.2
95°	72.0	98.9	56.4	56.7	64.8
97.5°	102.5	172.0	328.1	99.0	83.8
100°	126.3	208.6	646.4	193.1	127.1
102.5°	150.2	238.8	871.5	499.1	272.2
105°	186.1	273.5	987.4	1253.9	828.0
107.5°	224.5	287.6	943.0	1823.7	1705.8
110°	248.4	309.3	917.0	1916.1	2056.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	274.4	335.3	891.0	1862.0	2099.7
115°	310.7	371.7	852.1	1757.3	2051.0
117.5°	350.2	410.6	842.3	1643.8	1946.0
120°	378.4	436.7	825.0	1557.5	1872.4
122.5°	400.1	460.5	801.3	1483.3	1772.9
125°	435.4	493.6	803.4	1393.7	1645.1
127.5°	464.1	525.4	801.8	1289.2	1538.0
130°	481.5	544.9	806.2	1217.6	1455.7
132.5°	498.9	562.4	802.0	1186.4	1382.1
135°	530.3	588.5	800.9	1145.7	1315.0
137.5°	557.4	619.8	800.9	1100.8	1245.8
140°	579.0	637.3	800.9	1074.5	1206.8
142.5°	600.7	654.7	805.3	1044.0	1167.8
145°	627.8	680.7	806.3	998.1	1104.0
147.5°	660.2	706.8	812.8	965.1	1046.6
150°	681.9	724.2	817.2	943.2	1012.0
152.5°	703.5	741.6	817.2	925.6	981.7
155°	736.0	762.4	822.6	904.7	947.0
157.5°	762.0	787.4	829.1	891.5	922.1
160°	779.3	800.4	833.4	882.7	909.2
162.5°	792.3	813.4	837.7	878.2	896.2
165°	817.2	827.7	844.2	866.2	882.1
167.5°	831.2	840.8	849.6	860.7	870.2
170°	844.2	849.5	849.6	860.6	865.9
172.5°	848.5	858.1	854.0	856.2	861.5
175°	860.5	865.7	860.5	854.9	849.6
177.5°	860.5	864.7	860.5	860.4	856.1
180°	860.5	860.5	860.5	860.5	860.5

(END OF REPORT)