

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: P644749

Luminaire Tested: OMN4DIP-SR4F0-125D150U940-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644749
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-SR4F0-125D150U940-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

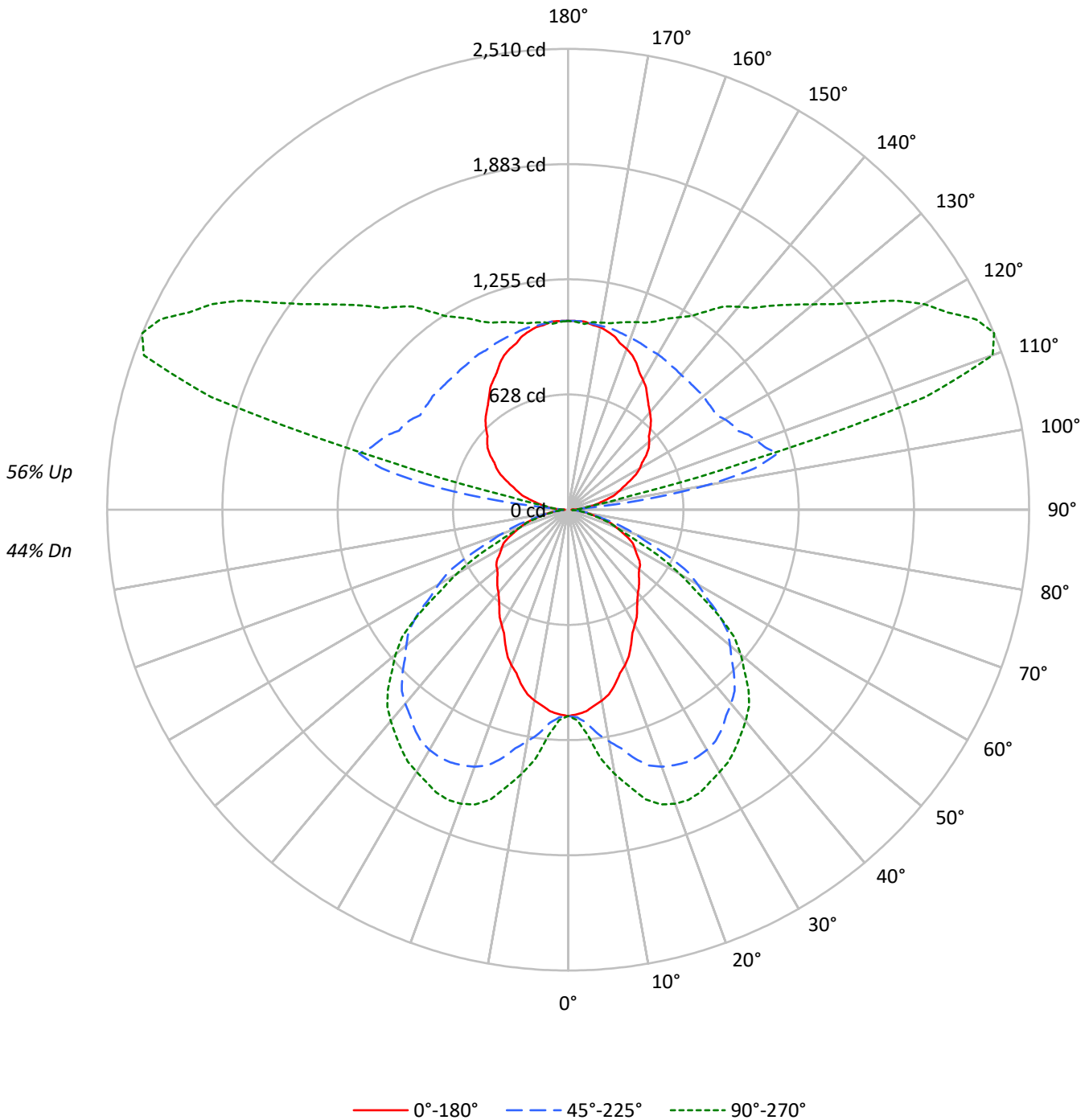
Lumens per Lamp: N/A
Luminaire Lumens: 9875.0 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 88.6
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

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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	80	80	80	64	64	64	50	50	50	44				
1	96	92	88	85	88	85	81	78	70	68	66	57	55	54	45	44	43	37				
2	88	81	74	69	80	74	69	64	61	58	54	50	47	45	39	37	36	31				
3	80	71	63	58	73	65	59	54	54	49	46	44	41	38	35	32	30	26				
4	73	62	55	49	67	57	50	45	48	43	39	39	35	32	31	28	26	22				
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19				
6	62	49	41	36	56	46	38	33	38	33	29	31	27	24	25	22	20	17				
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15				
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	21	18	15	13				
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12				
10	46	33	26	21	42	31	25	20	26	21	18	22	18	15	18	15	12	10				

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	1.2
10°-20°	383.0	3.9
20°-30°	636.4	6.4
30°-40°	802.8	8.1
40°-50°	858.2	8.7
50°-60°	757.4	7.7
60°-70°	486.1	4.9
70°-80°	215.6	2.2
80°-90°	58.2	0.6
90°-100°	141.2	1.4
100°-110°	910.7	9.2
110°-120°	1230.7	12.5
120°-130°	1000.4	10.1
130°-140°	801.4	8.1
140°-150°	631.5	6.4
150°-160°	461.7	4.7
160°-170°	286.8	2.9
170°-180°	97.8	1.0
0°-30°	1134.7	11.5
0°-40°	1937.4	19.6
0°-60°	3553.0	36.0
0°-90°	4312.9	43.7
90°-120°	2282.5	23.1
90°-150°	4715.8	47.8
90°-180°	5562.0	56.3
0°-180°	9875.0	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	25	29	35	30	15
95°	80	115	65	66	76	79
105°	219	324	1179	1498	990	232
115°	369	442	1017	2100	2452	367
125°	519	588	959	1666	1967	461
135°	634	704	958	1370	1572	489
145°	750	814	964	1193	1320	471
155°	880	912	983	1082	1132	404
165°	977	990	1009	1036	1055	274
175°	1029	1035	1029	1022	1016	97
180°	1029	1029	1029	1029	1029	

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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	26.0	26.6	25.8	22.7
90°	18.3	24.6	28.6	35.0	29.9
92.5°	40.1	40.3	42.1	51.6	51.6
95°	80.5	114.6	64.8	66.3	76.4
97.5°	117.5	202.2	390.4	117.4	99.7
100°	146.4	246.3	771.3	229.9	151.4
102.5°	175.4	282.4	1040.4	596.1	325.3
105°	218.9	323.8	1178.9	1498.5	989.9
107.5°	264.9	341.3	1125.8	2179.7	2039.3
110°	293.9	367.2	1094.8	2290.3	2458.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	324.9	398.3	1063.7	2225.6	2510.3
115°	368.9	442.3	1017.1	2100.3	2452.0
117.5°	416.3	488.9	1005.5	1964.7	2326.5
120°	450.4	520.0	984.8	1861.5	2238.5
122.5°	476.3	548.9	956.8	1772.9	2119.5
125°	519.0	588.5	958.9	1665.7	1966.8
127.5°	553.9	626.8	957.6	1540.9	1838.7
130°	574.6	650.5	962.8	1455.7	1740.4
132.5°	596.3	672.2	958.6	1418.3	1652.4
135°	634.0	703.6	957.5	1369.7	1572.2
137.5°	666.4	741.0	957.5	1316.0	1489.3
140°	692.3	761.9	957.5	1284.6	1442.8
142.5°	718.1	782.7	962.7	1248.1	1396.2
145°	750.5	813.8	964.0	1193.3	1319.8
147.5°	789.3	845.0	971.8	1153.8	1251.3
150°	815.2	865.8	976.9	1127.6	1209.8
152.5°	841.1	886.6	976.9	1106.6	1173.6
155°	879.9	911.5	983.4	1081.6	1132.2
157.5°	910.9	941.3	991.2	1065.8	1102.4
160°	931.6	957.0	996.3	1055.3	1086.9
162.5°	947.2	972.5	1001.5	1049.9	1071.4
165°	976.9	989.6	1009.3	1035.6	1054.6
167.5°	993.8	1005.1	1015.8	1029.0	1040.3
170°	1009.3	1015.6	1015.8	1028.8	1035.2
172.5°	1014.5	1025.8	1020.9	1023.7	1030.0
175°	1028.7	1035.0	1028.7	1022.1	1015.8
177.5°	1028.7	1033.8	1028.7	1028.6	1023.5
180°	1028.7	1028.7	1028.7	1028.7	1028.7

(END OF REPORT)