

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: P644557

Luminaire Tested: OMN4DIP-SR4F0-100D150U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644557
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-SR4F0-100D150U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

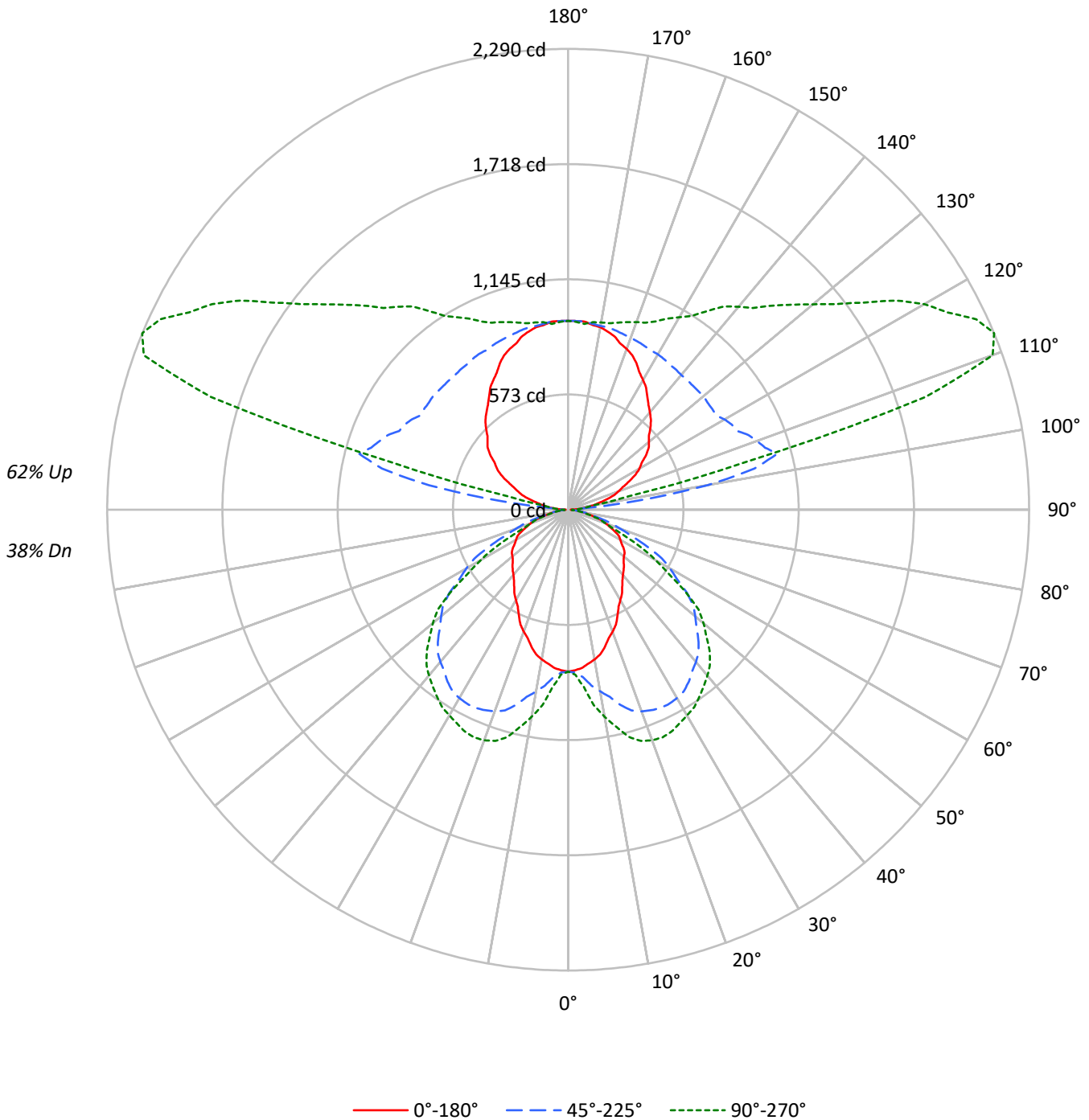
Lumens per Lamp: N/A
Luminaire Lumens: 8155.0 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78.5
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				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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38			38
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38	32			32
2	87	79	73	68	78	72	67	63	59	55	52	46	44	42	35	33	32	27			27
3	79	70	62	57	71	63	57	52	52	47	44	41	38	35	31	29	27	23			23
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	28	25	23	19			19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	25	22	20	17			17
6	61	49	41	35	55	45	38	32	37	31	27	29	25	22	22	20	18	14			14
7	56	44	36	30	51	40	33	28	33	28	24	26	23	20	20	18	15	13			13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11			11
9	48	36	29	24	44	33	26	22	27	22	19	22	18	15	17	14	12	10			10
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	16	13	11	9			9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12988	12988	12988
5°	12794	13522	14311
10°	12391	15028	17144
15°	11789	16792	19544
20°	11089	18321	20957
25°	10331	19363	21663
30°	9661	20159	22007
35°	9219	20576	22381
40°	8911	20818	22672
45°	8928	20888	22681
50°	9068	20675	22039
55°	9478	20273	20011
60°	9665	18849	16249
65°	9792	16508	11935
70°	9361	12982	9272
75°	8403	9688	7817
80°	7132	7652	6258
85°	6928	6243	5206

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 22681 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	1.0
10°-20°	274.2	3.4
20°-30°	455.5	5.6
30°-40°	574.6	7.0
40°-50°	614.2	7.5
50°-60°	542.1	6.6
60°-70°	347.9	4.3
70°-80°	154.3	1.9
80°-90°	42.1	0.5
90°-100°	125.9	1.5
100°-110°	829.0	10.2
110°-120°	1121.5	13.8
120°-130°	911.9	11.2
130°-140°	731.1	9.0
140°-150°	576.1	7.1
150°-160°	421.3	5.2
160°-170°	261.7	3.2
170°-180°	89.2	1.1
0°-30°	812.1	10.0
0°-40°	1386.7	17.0
0°-60°	2543.1	31.2
0°-90°	3087.4	37.9
90°-120°	2076.4	25.5
90°-150°	4295.4	52.7
90°-180°	5068.0	62.1
0°-180°	8155.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	789	813	834	863	883	74
15°	705	813	1005	1125	1169	198
25°	580	787	1087	1188	1216	267
35°	468	718	1044	1112	1136	294
45°	391	614	915	971	993	302
55°	337	483	720	724	711	299
65°	256	324	432	351	312	251
75°	135	149	155	133	125	144
85°	37	32	34	30	28	40
90°	13	19	23	29	25	11
95°	68	101	57	59	69	68
105°	196	292	1074	1367	903	208
115°	334	401	926	1916	2237	332
125°	472	535	873	1519	1794	419
135°	578	642	874	1250	1434	446
145°	685	742	880	1089	1204	430
155°	803	832	897	987	1033	369
165°	891	903	921	945	962	250
175°	939	944	939	932	927	89
180°	939	939	939	939	939	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	804.4	804.4	804.4	804.4	804.4
2.5°	798.4	810.1	810.4	815.0	820.9
5°	789.4	813.2	834.3	862.9	883.0
7.5°	770.7	813.2	880.7	947.0	979.9
10°	755.8	814.3	916.6	1005.5	1045.7
12.5°	736.3	813.9	952.6	1059.5	1105.6
15°	705.3	813.2	1004.6	1125.3	1169.2
17.5°	669.3	809.8	1045.4	1166.3	1204.7
20°	645.4	806.4	1066.3	1181.3	1219.7
22.5°	618.5	798.4	1078.3	1188.7	1224.2
25°	579.9	786.6	1086.9	1188.5	1216.0
27.5°	542.1	769.7	1087.3	1173.5	1196.9
30°	518.2	756.0	1081.3	1158.5	1180.4
32.5°	497.2	740.9	1069.3	1140.5	1164.0
35°	467.7	718.3	1043.9	1111.7	1135.5
37.5°	442.2	692.5	1011.7	1077.8	1105.6
40°	422.8	671.5	987.7	1053.7	1075.7
42.5°	407.8	649.3	959.3	1023.7	1042.7
45°	391.0	614.1	914.8	971.4	993.3
47.5°	373.0	577.9	863.5	917.0	931.2
50°	361.0	551.3	823.1	871.9	877.4
52.5°	353.6	523.3	784.2	814.9	816.0
55°	336.7	483.1	720.2	723.7	710.9
57.5°	314.3	436.1	639.0	620.8	590.0
60°	299.3	403.6	583.7	547.1	503.2
62.5°	284.3	372.5	525.3	466.1	414.9
65°	256.3	324.0	432.1	350.8	312.4
67.5°	223.7	270.6	339.3	262.4	236.8
70°	198.3	234.9	275.0	214.7	196.4
72.5°	174.3	199.2	222.6	177.5	168.0
75°	134.7	149.3	155.3	132.7	125.3
77.5°	99.1	99.9	107.8	93.5	89.8
80°	76.7	73.0	82.3	71.0	67.3
82.5°	58.7	53.6	59.9	51.6	49.4
85°	37.4	31.9	33.7	29.9	28.1
87.5°	22.1	18.8	19.6	19.2	17.0
90°	13.1	18.9	23.0	28.8	25.2
92.5°	31.8	33.1	35.7	44.9	45.8
95°	67.8	100.9	56.6	59.0	68.7
97.5°	102.2	180.9	354.2	106.1	90.4
100°	129.0	221.6	702.1	208.7	137.6
102.5°	155.8	254.5	947.7	543.2	296.7
105°	196.1	292.4	1074.0	1366.7	903.1
107.5°	238.2	308.8	1025.6	1988.2	1860.6
110°	265.0	332.5	997.3	2089.1	2243.1



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CATALOG NUMBER: OMN4DIP-SR4F0-100D150U930-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.4	360.8	969.0	2030.1	2290.3
115°	334.0	401.4	926.5	1915.8	2237.2
117.5°	377.3	444.0	915.8	1792.0	2122.7
120°	408.9	472.4	896.9	1697.9	2042.4
122.5°	432.5	499.1	871.8	1617.0	1933.8
125°	471.9	535.4	873.3	1519.3	1794.5
127.5°	504.3	570.4	872.6	1405.5	1677.6
130°	523.2	592.5	877.4	1328.1	1587.9
132.5°	543.8	613.1	874.4	1294.0	1507.6
135°	578.5	642.0	873.6	1249.7	1434.4
137.5°	608.0	676.1	873.6	1200.7	1358.8
140°	631.6	695.1	873.6	1172.0	1316.3
142.5°	655.2	714.1	878.3	1138.8	1273.8
145°	684.7	742.4	879.5	1088.8	1204.2
147.5°	720.1	770.9	886.6	1052.7	1141.6
150°	743.8	789.9	891.3	1028.8	1103.8
152.5°	767.4	808.9	891.3	1009.6	1070.8
155°	802.8	831.6	897.2	986.8	1033.0
157.5°	831.1	858.8	904.3	972.4	1005.8
160°	850.0	873.1	909.0	962.8	991.7
162.5°	864.2	887.3	913.8	957.9	977.5
165°	891.3	902.9	920.8	944.9	962.2
167.5°	906.7	917.1	926.7	938.8	949.2
170°	920.8	926.6	926.7	938.7	944.5
172.5°	925.6	936.0	931.5	934.0	939.7
175°	938.6	944.3	938.6	932.5	926.7
177.5°	938.6	943.2	938.6	938.5	933.8
180°	938.6	938.6	938.6	938.6	938.6

(END OF REPORT)