

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: P644608

Luminaire Tested: OMN4DIP-SR4F0-100D50U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644608
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-SR4F0-100D50U835-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

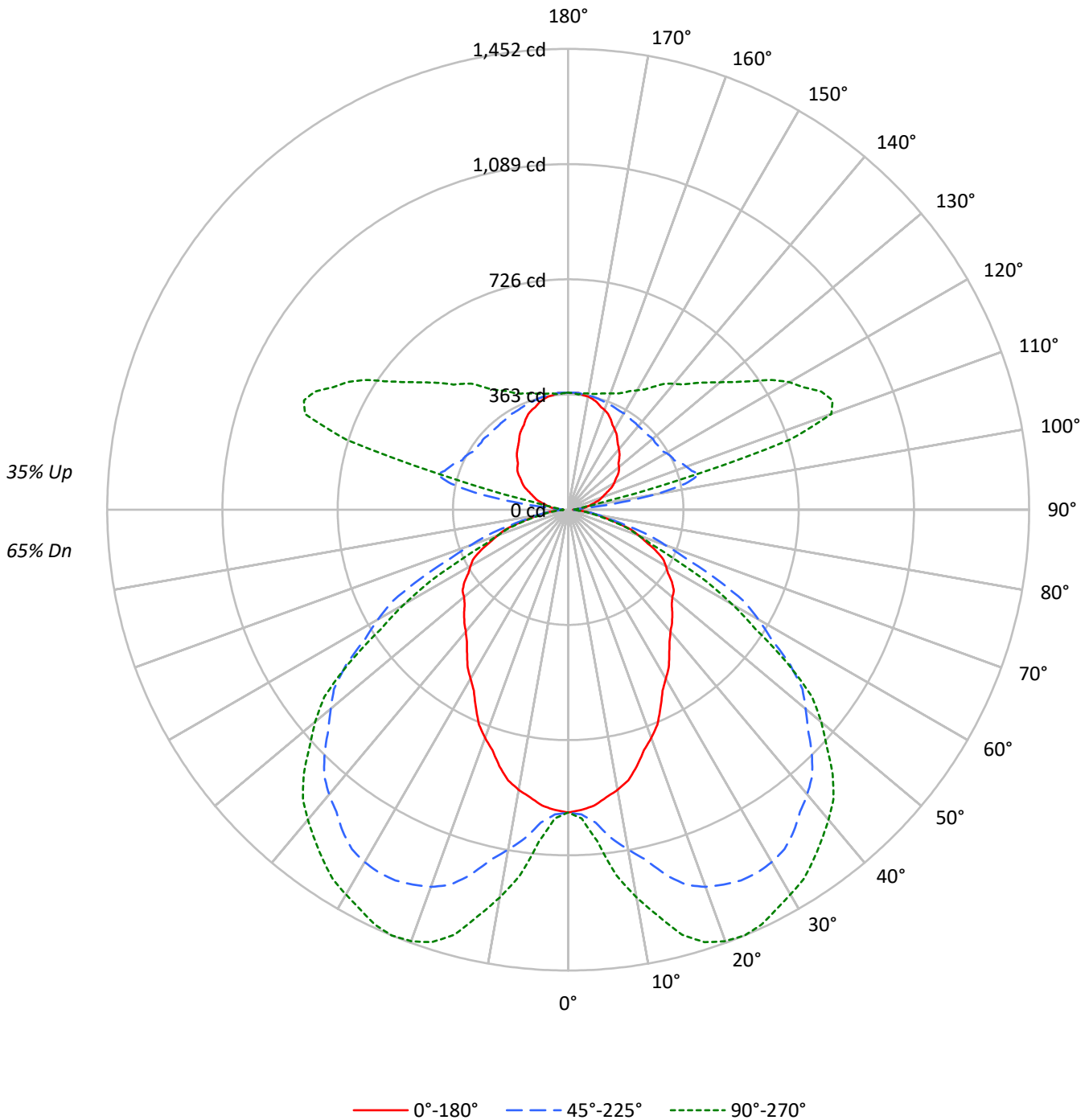
Lumens per Lamp: N/A
Luminaire Lumens: 5673.8 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 44.5
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			
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	0
RCR																				
0	111	111	111	111	104	104	104	104	91	91	91		80	80	80		69	69	69	65
1	101	97	93	89	95	91	88	85	80	78	76		71	69	67		62	60	59	55
2	92	85	78	73	86	80	74	69	71	66	63		62	59	56		54	52	50	46
3	84	74	67	61	79	70	63	58	62	57	52		55	51	47		48	45	42	39
4	77	66	57	51	72	62	55	49	55	49	45		49	44	40		43	39	36	33
5	70	58	50	44	66	55	48	42	49	43	38		43	39	35		38	34	31	28
6	65	52	44	38	61	49	42	36	44	38	33		39	34	30		35	30	27	25
7	60	47	39	33	56	45	37	32	40	34	29		35	30	27		31	27	24	22
8	55	43	35	29	52	40	33	28	36	30	26		32	27	24		29	24	21	19
9	52	39	31	26	48	37	30	25	33	27	23		30	25	21		26	22	19	17
10	48	36	28	23	45	34	27	22	31	25	21		27	22	19		24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15403	15403	15403
5°	15175	16037	16973
10°	14695	17823	20333
15°	13981	19915	23178
20°	13151	21728	24854
25°	12253	22963	25691
30°	11458	23909	26099
35°	10933	24402	26544
40°	10568	24689	26888
45°	10588	24772	26900
50°	10756	24521	26136
55°	11240	24045	23733
60°	11464	22352	19272
65°	11610	19580	14155
70°	11103	15394	10999
75°	9963	11485	9270
80°	8461	9075	7429
85°	8225	7392	6169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 26900 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	1.7
10°-20°	325.1	5.7
20°-30°	540.2	9.5
30°-40°	681.4	12.0
40°-50°	728.4	12.8
50°-60°	642.9	11.3
60°-70°	412.6	7.3
70°-80°	183.0	3.2
80°-90°	48.3	0.9
90°-100°	57.9	1.0
100°-110°	331.4	5.8
110°-120°	445.2	7.8
120°-130°	361.3	6.4
130°-140°	287.9	5.1
140°-150°	226.6	4.0
150°-160°	165.7	2.9
160°-170°	102.9	1.8
170°-180°	35.1	0.6
0°-30°	963.2	17.0
0°-40°	1644.6	29.0
0°-60°	3016.0	53.2
0°-90°	3659.9	64.5
90°-120°	834.5	14.7
90°-150°	1710.3	30.1
90°-180°	2014.0	35.5
0°-180°	5673.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	936	964	990	1023	1047	88
15°	836	964	1191	1335	1387	234
25°	688	933	1289	1410	1442	317
35°	555	852	1238	1318	1347	348
45°	464	728	1085	1152	1178	358
55°	399	573	854	858	843	354
65°	304	384	512	416	370	297
75°	160	177	184	157	149	171
85°	44	38	40	35	33	47
90°	16	18	18	20	16	11
95°	43	50	30	28	30	39
105°	88	124	427	539	355	93
115°	139	164	369	755	880	138
125°	190	215	348	599	706	169
135°	228	252	344	492	564	176
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	954.0	954.0	954.0	954.0	954.0
2.5°	946.9	960.8	961.1	966.6	973.5
5°	936.3	964.5	989.5	1023.3	1047.2
7.5°	914.1	964.4	1044.5	1123.1	1162.1
10°	896.3	965.7	1087.1	1192.5	1240.2
12.5°	873.2	965.2	1129.7	1256.5	1311.2
15°	836.4	964.4	1191.4	1334.6	1386.6
17.5°	793.8	960.4	1239.8	1383.2	1428.8
20°	765.4	956.3	1264.6	1401.0	1446.5
22.5°	733.5	946.9	1278.8	1409.8	1451.9
25°	687.8	932.9	1289.0	1409.6	1442.1
27.5°	643.0	912.8	1289.5	1391.7	1419.5
30°	614.6	896.6	1282.4	1373.9	1399.9
32.5°	589.7	878.7	1268.2	1352.6	1380.4
35°	554.7	851.8	1238.0	1318.5	1346.7
37.5°	524.5	821.2	1199.8	1278.2	1311.2
40°	501.4	796.4	1171.4	1249.7	1275.7
42.5°	483.7	770.0	1137.7	1214.1	1236.6
45°	463.7	728.3	1084.9	1152.0	1178.1
47.5°	442.4	685.4	1024.1	1087.5	1104.4
50°	428.2	653.8	976.2	1034.0	1040.5
52.5°	419.3	620.6	930.0	966.5	967.8
55°	399.3	572.9	854.2	858.3	843.1
57.5°	372.7	517.2	757.9	736.2	699.7
60°	355.0	478.6	692.2	648.9	596.8
62.5°	337.2	441.8	623.0	552.8	492.1
65°	303.9	384.2	512.5	416.1	370.5
67.5°	265.3	320.9	402.5	311.2	280.9
70°	235.2	278.6	326.1	254.6	233.0
72.5°	206.8	236.3	264.0	210.5	199.2
75°	159.7	177.1	184.1	157.3	148.6
77.5°	117.6	118.5	127.8	110.8	106.5
80°	91.0	86.6	97.6	84.2	79.9
82.5°	69.7	63.6	71.0	61.2	58.6
85°	44.4	37.9	39.9	35.4	33.3
87.5°	26.2	21.4	21.3	20.0	17.4
90°	15.5	17.8	18.0	20.2	15.8
92.5°	26.4	23.5	21.8	24.1	21.6
95°	43.0	50.2	29.7	27.6	30.0
97.5°	54.7	81.4	145.0	44.7	37.0
100°	64.1	96.2	280.6	85.0	55.6
102.5°	73.5	109.1	377.2	215.4	117.0
105°	87.5	123.9	426.9	539.1	355.3
107.5°	103.8	128.9	407.9	783.6	731.9
110°	113.2	138.2	396.7	823.2	882.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	124.3	149.4	385.6	800.0	900.9
115°	138.8	163.9	368.9	755.1	880.0
117.5°	155.5	180.6	364.7	706.4	835.0
120°	166.8	191.7	357.3	669.4	803.4
122.5°	176.1	201.1	346.2	637.5	760.7
125°	190.1	215.1	348.0	599.1	705.9
127.5°	201.3	228.5	346.2	554.0	659.9
130°	208.8	236.0	348.1	522.4	624.6
132.5°	214.5	241.8	344.5	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2

(END OF REPORT)