

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: P644917

Luminaire Tested: OMN4DIP-SR4F0-50D150U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644917
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-SR4F0-50D150U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

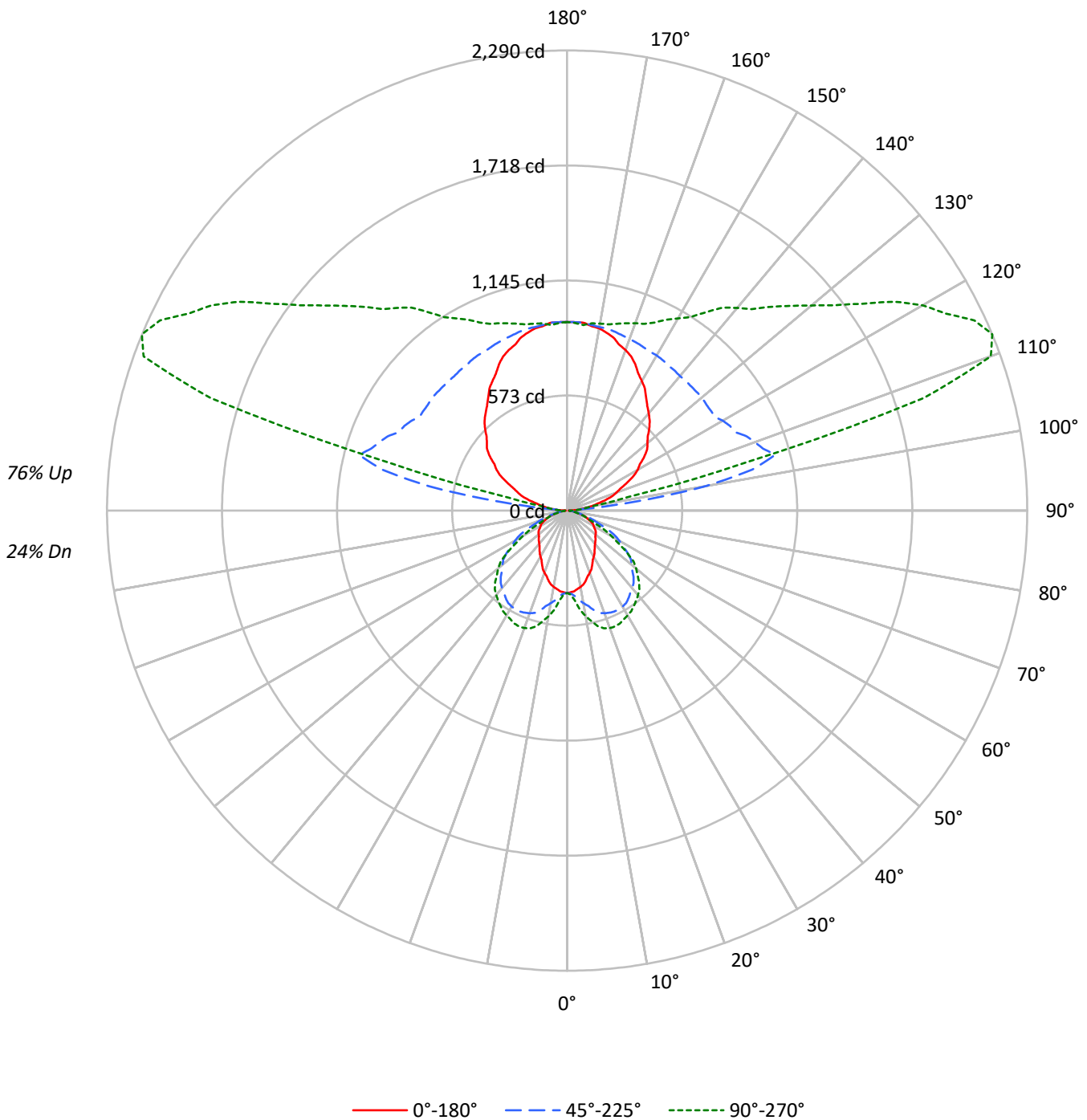
Lumens per Lamp: N/A
Luminaire Lumens: 6630.7 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 62.9
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										
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	50	30	10	0														
RCR																																						
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24																				
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20																				
2	84	77	71	66	74	68	63	59	53	49	47	38	36	34	25	24	23	17																				
3	76	67	60	55	67	60	54	49	46	42	39	34	31	29	22	21	19	14																				
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	16	12																				
5	64	53	45	39	56	47	40	35	36	32	28	27	24	21	18	16	14	10																				
6	58	47	39	34	52	42	35	30	33	28	24	24	21	18	16	14	12	9																				
7	54	42	34	29	48	38	31	26	29	25	21	22	18	16	14	12	11	8																				
8	50	38	31	25	44	34	28	23	27	22	19	20	16	14	13	11	10	7																				
9	46	34	27	22	41	31	25	20	24	20	16	18	15	13	12	10	9	6																				
10	43	31	24	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6625	6625	6625
5°	6527	6898	7300
10°	6320	7666	8745
15°	6013	8565	9969
20°	5656	9345	10689
25°	5270	9877	11049
30°	4928	10282	11225
35°	4703	10494	11416
40°	4546	10619	11565
45°	4553	10654	11570
50°	4627	10547	11241
55°	4836	10342	10207
60°	4931	9613	8289
65°	4993	8420	6090
70°	4773	6623	4730
75°	4286	4941	3986
80°	3636	3905	3199
85°	3538	3186	2649

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11570 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	0.6
10°-20°	139.8	2.1
20°-30°	232.3	3.5
30°-40°	293.1	4.4
40°-50°	313.3	4.7
50°-60°	276.5	4.2
60°-70°	177.5	2.7
70°-80°	78.7	1.2
80°-90°	22.5	0.3
90°-100°	120.8	1.8
100°-110°	825.7	12.5
110°-120°	1119.0	16.9
120°-130°	910.3	13.7
130°-140°	730.9	11.0
140°-150°	576.1	8.7
150°-160°	421.3	6.4
160°-170°	261.7	3.9
170°-180°	89.2	1.3
0°-30°	414.2	6.2
0°-40°	707.3	10.7
0°-60°	1297.2	19.6
0°-90°	1575.8	23.8
90°-120°	2065.5	31.1
90°-150°	4282.8	64.6
90°-180°	5055.0	76.2
0°-180°	6630.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	403	415	426	440	450	38
15°	360	415	512	574	596	101
25°	296	401	554	606	620	136
35°	239	366	532	567	579	150
45°	199	313	467	496	507	154
55°	172	246	367	369	363	152
65°	131	165	220	179	159	128
75°	69	76	79	68	64	73
85°	19	16	17	15	14	20
90°	7	12	18	23	22	7
95°	58	94	52	56	67	61
105°	190	287	1071	1366	903	200
115°	329	398	924	1915	2237	327
125°	469	533	871	1518	1794	417
135°	578	642	874	1250	1434	445
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°	410.3	410.3	410.3	410.3	410.3
2.5°	407.3	413.2	413.4	415.7	418.7
5°	402.7	414.8	425.6	440.1	450.4
7.5°	393.1	414.8	449.2	483.0	499.8
10°	385.5	415.4	467.6	512.9	533.4
12.5°	375.6	415.1	485.9	540.4	563.9
15°	359.7	414.8	512.4	574.0	596.4
17.5°	341.4	413.1	533.2	594.9	614.5
20°	329.2	411.3	543.9	602.6	622.1
22.5°	315.5	407.3	550.0	606.3	624.4
25°	295.8	401.2	554.4	606.2	620.2
27.5°	276.5	392.6	554.6	598.6	610.5
30°	264.3	385.6	551.5	590.9	602.1
32.5°	253.6	377.9	545.4	581.8	593.7
35°	238.6	366.4	532.4	567.1	579.2
37.5°	225.6	353.2	516.0	549.8	563.9
40°	215.7	342.5	503.8	537.5	548.7
42.5°	208.0	331.2	489.3	522.2	531.9
45°	199.4	313.3	466.6	495.5	506.7
47.5°	190.3	294.8	440.5	467.7	475.0
50°	184.2	281.2	419.9	444.7	447.5
52.5°	180.3	266.9	400.0	415.7	416.2
55°	171.8	246.4	367.4	369.1	362.6
57.5°	160.3	222.4	326.0	316.6	301.0
60°	152.7	205.9	297.7	279.1	256.7
62.5°	145.0	190.0	267.9	237.8	211.6
65°	130.7	165.2	220.4	178.9	159.4
67.5°	114.1	138.0	173.1	133.9	120.8
70°	101.1	119.8	140.3	109.5	100.2
72.5°	88.9	101.6	113.6	90.5	85.7
75°	68.7	76.2	79.2	67.7	63.9
77.5°	50.6	50.9	55.0	47.7	45.8
80°	39.1	37.3	42.0	36.2	34.4
82.5°	30.0	27.3	30.5	26.3	25.2
85°	19.1	16.3	17.2	15.2	14.3
87.5°	11.3	10.2	11.1	11.5	10.4
90°	6.7	12.5	17.5	23.4	21.5
92.5°	23.1	26.7	30.9	40.9	43.6
95°	57.7	94.4	52.0	56.2	66.8
97.5°	93.2	174.6	350.7	104.3	89.5
100°	120.7	216.1	699.4	206.9	136.7
102.5°	148.3	249.0	945.0	542.2	296.5
105°	189.7	286.9	1071.3	1365.8	903.1
107.5°	232.0	304.2	1022.9	1987.3	1860.6
110°	259.5	327.9	994.5	2088.2	2243.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	287.9	356.2	966.2	2029.2	2290.3
115°	329.4	397.8	923.7	1914.9	2237.2
117.5°	372.9	440.3	913.1	1791.2	2122.7
120°	405.2	468.7	894.2	1697.0	2042.4
122.5°	428.8	496.2	869.8	1616.1	1933.8
125°	469.2	532.7	870.6	1518.4	1794.5
127.5°	502.5	567.9	870.8	1404.8	1677.6
130°	521.4	590.6	875.5	1328.1	1587.9
132.5°	543.4	612.7	874.0	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)