

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: P645007

Luminaire Tested: OMN4DIP-SR4F0-50D75U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645007
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-SR4F0-50D75U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

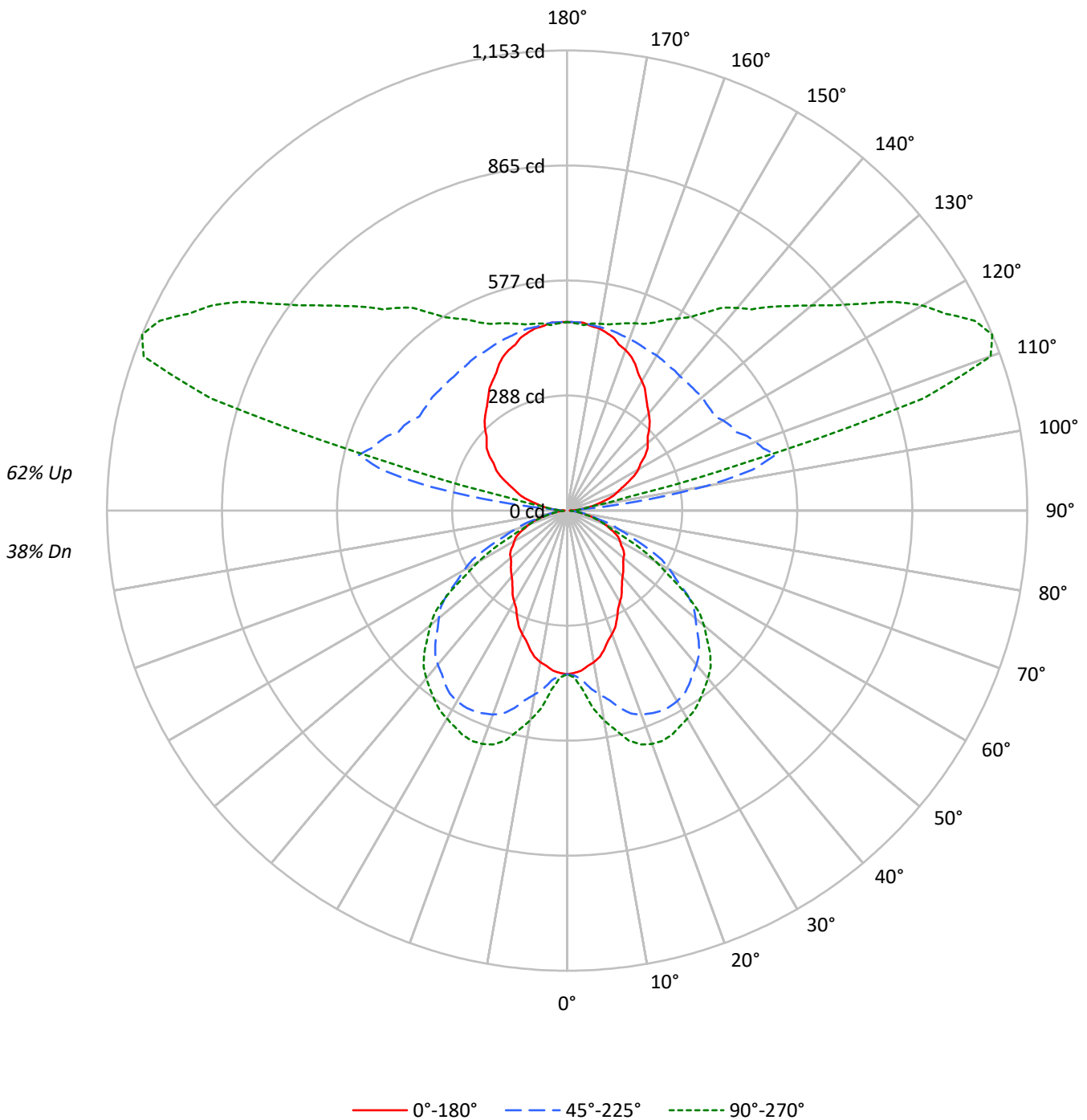
Lumens per Lamp: N/A
Luminaire Lumens: 4125.7 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 35.1
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	95	91	87	84	86	83	80	77	67	65	63	53	52	50	40	39	38	32				
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27				
3	79	70	63	57	71	64	57	52	52	47	44	41	38	35	31	29	27	23				
4	72	62	54	48	65	56	49	44	46	41	37	37	33	30	28	25	23	19				
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17				
6	61	49	41	35	55	45	38	33	37	31	27	29	25	23	22	20	18	15				
7	56	44	36	31	51	40	33	28	33	28	24	27	23	20	20	18	16	13				
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	19	16	14	11				
9	48	36	29	24	44	33	26	22	27	22	19	22	18	16	17	14	12	10				
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9				

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	1.0
10°-20°	139.8	3.4
20°-30°	232.3	5.6
30°-40°	293.1	7.1
40°-50°	313.3	7.6
50°-60°	276.5	6.7
60°-70°	177.5	4.3
70°-80°	78.7	1.9
80°-90°	21.5	0.5
90°-100°	63.4	1.5
100°-110°	417.3	10.1
110°-120°	564.5	13.7
120°-130°	459.0	11.1
130°-140°	368.0	8.9
140°-150°	290.0	7.0
150°-160°	212.0	5.1
160°-170°	131.7	3.2
170°-180°	44.9	1.1
0°-30°	414.2	10.0
0°-40°	707.3	17.1
0°-60°	1297.2	31.4
0°-90°	1574.8	38.2
90°-120°	1045.3	25.3
90°-150°	2162.3	52.4
90°-180°	2551.0	61.8
0°-180°	4125.7	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	10	12	15	13	6
95°	34	51	28	30	35	34
105°	99	147	541	688	455	105
115°	168	202	466	964	1126	167
125°	238	270	440	765	903	211
135°	291	323	440	629	722	224
145°	345	374	443	548	606	216
155°	404	419	452	497	520	186
165°	449	454	464	476	484	126
175°	472	475	472	469	466	45
180°	472	472	472	472	472	



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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	9.6	10.0	9.8	8.7
90°	6.7	9.6	11.7	14.6	12.7
92.5°	16.1	16.8	18.0	22.6	23.1
95°	34.3	50.9	28.5	29.7	34.6
97.5°	51.5	91.2	178.3	53.4	45.5
100°	65.0	111.6	353.5	105.1	69.3
102.5°	78.5	128.2	477.1	273.5	149.3
105°	98.8	147.2	540.6	687.9	454.6
107.5°	120.0	155.5	516.3	1000.8	936.5
110°	133.5	167.4	502.0	1051.5	1129.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	147.7	181.7	487.8	1021.9	1152.8
115°	168.2	202.1	466.4	964.3	1126.1
117.5°	190.0	223.5	461.0	902.0	1068.4
120°	205.9	237.8	451.5	854.7	1028.0
122.5°	217.7	251.3	438.9	813.9	973.4
125°	237.6	269.5	439.6	764.7	903.2
127.5°	253.9	287.2	439.3	707.5	844.4
130°	263.4	298.2	441.6	668.5	799.3
132.5°	273.7	308.6	440.1	651.4	758.8
135°	291.2	323.1	439.7	629.0	722.0
137.5°	306.0	340.3	439.7	604.4	684.0
140°	317.9	349.9	439.7	589.9	662.6
142.5°	329.8	359.4	442.1	573.2	641.2
145°	344.7	373.7	442.7	548.0	606.1
147.5°	362.5	388.1	446.3	529.9	574.6
150°	374.4	397.6	448.7	517.8	555.6
152.5°	386.3	407.2	448.7	508.2	539.0
155°	404.1	418.6	451.6	496.7	520.0
157.5°	418.3	432.3	455.2	489.4	506.3
160°	427.9	439.5	457.6	484.6	499.2
162.5°	435.0	446.6	459.9	482.2	492.0
165°	448.7	454.5	463.5	475.6	484.3
167.5°	456.4	461.6	466.5	472.5	477.8
170°	463.5	466.4	466.5	472.5	475.4
172.5°	465.9	471.1	468.9	470.1	473.0
175°	472.4	475.3	472.4	469.4	466.5
177.5°	472.4	474.7	472.4	472.4	470.0
180°	472.4	472.4	472.4	472.4	472.4

(END OF REPORT)