

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: P645058

Luminaire Tested: OMN4DIP-SR4F0-75D125U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645058
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-SR4F0-75D125U835-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

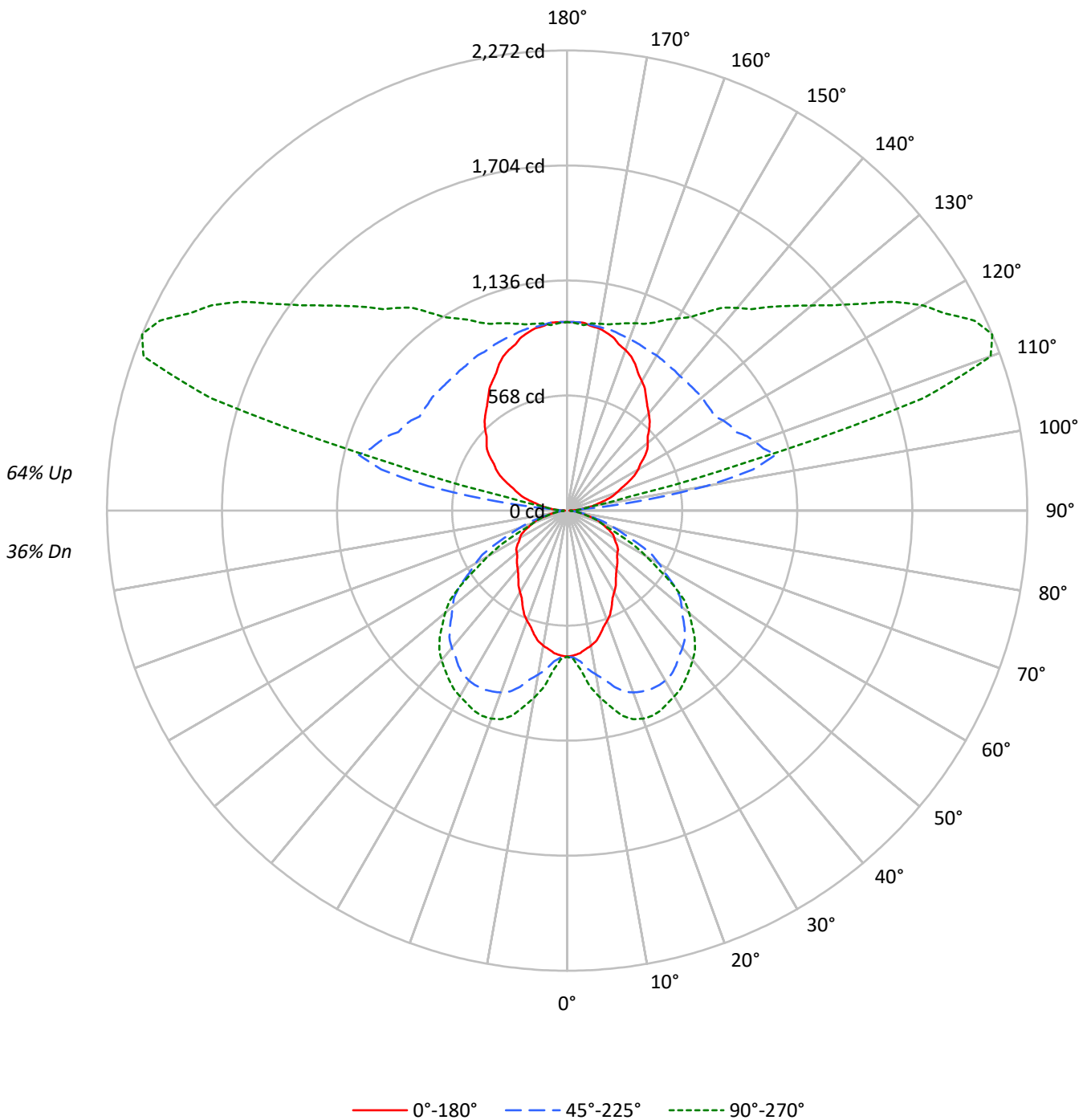
Lumens per Lamp: N/A
Luminaire Lumens: 7792.3 lumens
Efficiency: N/A
Efficacy: 129.9 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 60
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	94	94	94	94	75	75	75	58	58	58	43	43	43	36				
1	95	90	87	83	85	82	79	76	66	64	62	51	50	49	38	37	36	30				
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	33	32	31	25				
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	29	28	26	21				
4	72	61	53	47	65	56	49	44	45	40	36	35	32	29	26	24	22	18				
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	23	21	19	16				
6	60	48	40	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14				
7	56	44	36	30	50	40	33	28	32	27	23	26	22	19	19	17	15	12				
8	51	39	32	27	46	36	29	25	29	24	21	23	20	17	18	15	13	11				
9	48	36	28	23	43	33	26	22	27	22	18	21	18	15	16	14	12	9				
10	44	33	26	21	40	30	24	19	25	20	16	20	16	13	15	12	11	8				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11641	11641	11641
5°	11468	12122	12828
10°	11106	13472	15369
15°	10567	15052	17518
20°	9940	16423	18785
25°	9260	17355	19417
30°	8660	18069	19727
35°	8263	18443	20061
40°	7988	18661	20322
45°	8003	18724	20331
50°	8128	18532	19753
55°	8495	18173	17937
60°	8664	16895	14567
65°	8776	14800	10697
70°	8389	11637	8313
75°	7530	8684	7006
80°	6397	6862	5616
85°	6206	5595	4668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 20331 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	0.9
10°-20°	245.8	3.2
20°-30°	408.3	5.2
30°-40°	515.0	6.6
40°-50°	550.6	7.1
50°-60°	485.9	6.2
60°-70°	311.9	4.0
70°-80°	138.3	1.8
80°-90°	38.0	0.5
90°-100°	123.9	1.6
100°-110°	821.8	10.5
110°-120°	1112.0	14.3
120°-130°	904.3	11.6
130°-140°	725.2	9.3
140°-150°	571.5	7.3
150°-160°	417.9	5.4
160°-170°	259.6	3.3
170°-180°	88.5	1.1
0°-30°	728.0	9.3
0°-40°	1243.0	16.0
0°-60°	2279.5	29.3
0°-90°	2767.6	35.5
90°-120°	2057.7	26.4
90°-150°	4258.7	54.7
90°-180°	5025.0	64.5
0°-180°	7792.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	708	729	748	773	792	66
15°	632	729	900	1009	1048	177
25°	520	705	974	1065	1090	239
35°	419	644	936	996	1018	263
45°	350	550	820	871	890	271
55°	302	433	646	649	637	268
65°	230	290	387	314	280	225
75°	121	134	139	119	112	129
85°	34	29	30	27	25	35
90°	12	18	22	28	24	10
95°	65	99	55	58	68	66
105°	193	289	1065	1356	896	205
115°	330	398	918	1900	2219	328
125°	468	531	866	1507	1780	416
135°	574	637	867	1240	1423	442
145°	679	736	872	1080	1195	427
155°	796	825	890	979	1025	366
165°	884	896	914	937	954	248
175°	931	937	931	925	919	88
180°	931	931	931	931	931	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	721.0	721.0	721.0	721.0	721.0
2.5°	715.7	726.2	726.4	730.6	735.8
5°	707.6	728.9	747.9	773.4	791.5
7.5°	690.9	728.9	789.5	848.8	878.3
10°	677.4	729.9	821.7	901.3	937.4
12.5°	660.0	729.5	853.8	949.7	991.0
15°	632.2	728.9	900.5	1008.7	1048.0
17.5°	600.0	725.9	937.0	1045.5	1079.9
20°	578.5	722.8	955.8	1058.9	1093.3
22.5°	554.4	715.7	966.5	1065.5	1097.3
25°	519.8	705.1	974.2	1065.4	1089.9
27.5°	485.9	689.9	974.6	1051.9	1072.8
30°	464.5	677.6	969.2	1038.4	1058.1
32.5°	445.7	664.1	958.5	1022.3	1043.3
35°	419.2	643.8	935.7	996.5	1017.8
37.5°	396.4	620.7	906.8	966.1	991.0
40°	379.0	601.9	885.4	944.5	964.2
42.5°	365.6	582.0	859.9	917.6	934.7
45°	350.5	550.5	820.0	870.7	890.4
47.5°	334.4	518.0	774.0	821.9	834.7
50°	323.6	494.1	737.8	781.5	786.4
52.5°	316.9	469.1	702.9	730.5	731.4
55°	301.8	433.0	645.6	648.7	637.2
57.5°	281.7	390.9	572.8	556.4	528.9
60°	268.3	361.8	523.2	490.4	451.1
62.5°	254.9	333.9	470.9	417.8	371.9
65°	229.7	290.4	387.4	314.5	280.0
67.5°	200.6	242.5	304.2	235.2	212.3
70°	177.7	210.5	246.5	192.5	176.1
72.5°	156.3	178.6	199.5	159.1	150.6
75°	120.7	133.8	139.2	118.9	112.3
77.5°	88.9	89.5	96.6	83.8	80.5
80°	68.8	65.5	73.8	63.6	60.4
82.5°	52.7	48.1	53.7	46.2	44.3
85°	33.5	28.6	30.2	26.8	25.2
87.5°	19.8	17.0	17.8	17.6	15.6
90°	11.7	17.5	21.8	27.6	24.3
92.5°	29.8	31.6	34.5	43.7	45.0
95°	65.3	98.8	55.2	58.0	67.8
97.5°	99.6	178.3	350.7	104.9	89.5
100°	126.3	218.8	696.0	206.7	136.4
102.5°	153.1	251.4	939.6	538.7	294.3
105°	193.3	289.0	1064.9	1355.6	895.9
107.5°	235.1	305.4	1016.9	1972.2	1845.7
110°	261.9	328.9	988.8	2072.2	2225.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.0	357.0	960.7	2013.7	2272.0
115°	330.4	397.5	918.5	1900.3	2219.3
117.5°	373.4	439.7	908.0	1777.6	2105.7
120°	404.9	467.9	889.2	1684.2	2026.1
122.5°	428.3	494.6	864.5	1603.9	1918.3
125°	467.6	530.6	865.8	1506.9	1780.1
127.5°	499.9	565.4	865.3	1394.1	1664.2
130°	518.7	587.4	870.0	1317.5	1575.2
132.5°	539.4	608.1	867.3	1283.7	1495.5
135°	573.9	636.8	866.6	1239.7	1422.9
137.5°	603.1	670.7	866.6	1191.1	1348.0
140°	626.6	689.5	866.6	1162.7	1305.8
142.5°	650.0	708.4	871.3	1129.7	1263.7
145°	679.3	736.5	872.5	1080.1	1194.6
147.5°	714.4	764.8	879.5	1044.3	1132.5
150°	737.8	783.6	884.2	1020.6	1095.0
152.5°	761.2	802.5	884.2	1001.5	1062.2
155°	796.4	825.0	890.1	978.9	1024.7
157.5°	824.5	852.0	897.1	964.6	997.8
160°	843.2	866.1	901.8	955.1	983.8
162.5°	857.3	880.2	906.5	950.2	969.7
165°	884.2	895.7	913.5	937.3	954.5
167.5°	899.4	909.7	919.3	931.3	941.6
170°	913.5	919.2	919.3	931.2	936.9
172.5°	918.2	928.5	924.0	926.5	932.2
175°	931.1	936.8	931.1	925.1	919.3
177.5°	931.1	935.6	931.1	931.0	926.4
180°	931.1	931.1	931.1	931.1	931.1

(END OF REPORT)