

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: P645178

Luminaire Tested: OMN4DIP-SR4F0-75D75U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645178
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-SR4F0-75D75U835-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

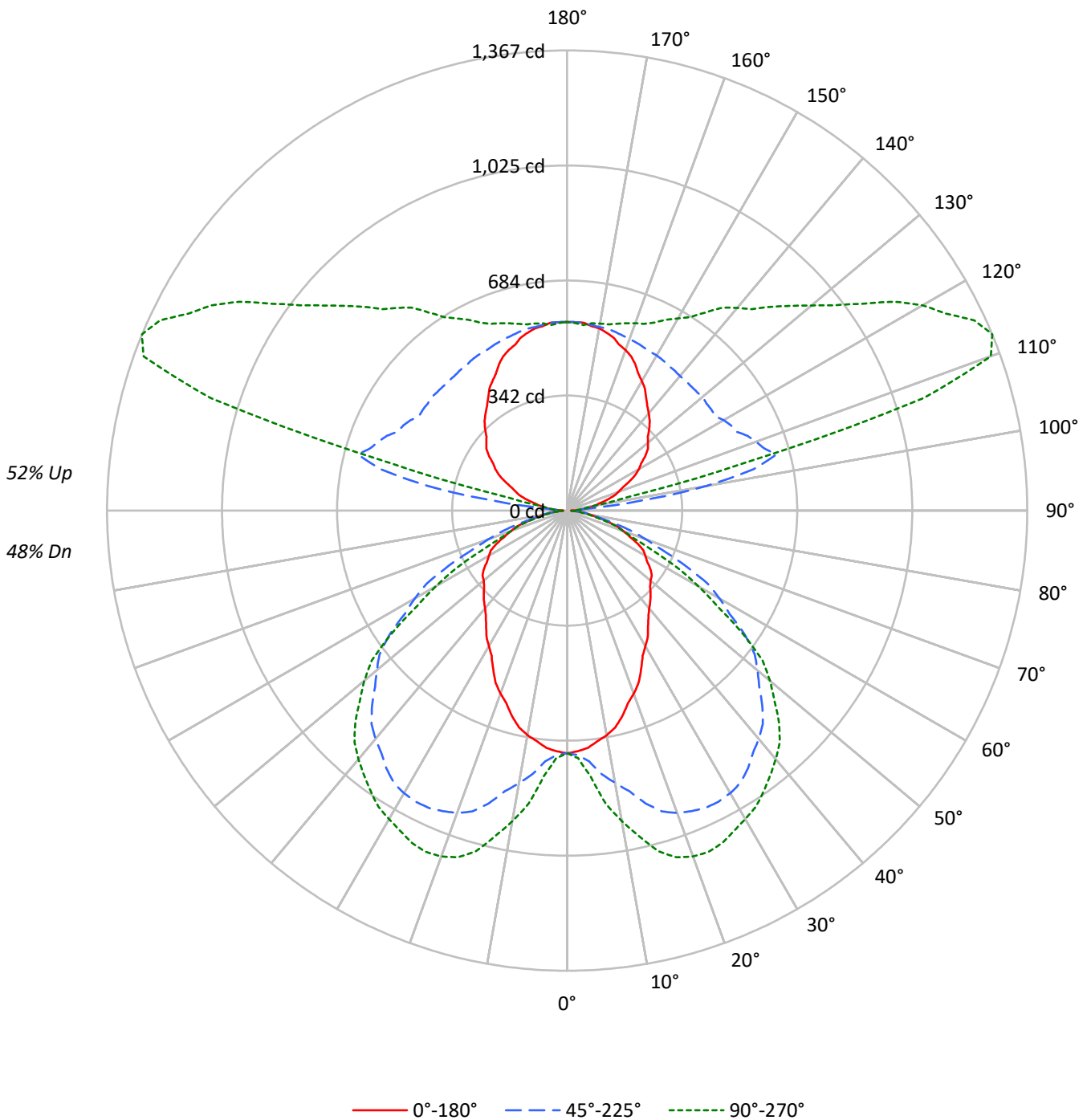
Lumens per Lamp: N/A
Luminaire Lumens: 5799.7 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.6
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	50	30	10	0		
RCR																										
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48	48	48	48	48	48	48		
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46	40	40	40	40	40	40	40		
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	39	34	34	34	34	34	34	34		
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33	29	29	29	29	29	29	29		
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24	24	24	24	24	24	24		
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24	21	21	21	21	21	21	21		
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21	18	18	18	18	18	18	18		
7	57	45	37	31	53	42	35	30	36	30	26	30	25	22	24	21	19	16	16	16	16	16	16	16		
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14	14	14	14	14	14	14		
9	49	37	30	24	45	34	28	23	29	24	20	25	21	18	20	17	15	13	13	13	13	13	13	13		
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	11	11	11	11	11	11	11		

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	1.3
10°-20°	245.8	4.2
20°-30°	408.3	7.0
30°-40°	515.0	8.9
40°-50°	550.6	9.5
50°-60°	485.9	8.4
60°-70°	311.9	5.4
70°-80°	138.3	2.4
80°-90°	37.1	0.6
90°-100°	78.3	1.4
100°-110°	496.9	8.6
110°-120°	671.0	11.6
120°-130°	545.3	9.4
130°-140°	436.5	7.5
140°-150°	343.9	5.9
150°-160°	251.5	4.3
160°-170°	156.2	2.7
170°-180°	53.3	0.9
0°-30°	728.0	12.6
0°-40°	1243.0	21.4
0°-60°	2279.5	39.3
0°-90°	2766.8	47.7
90°-120°	1246.2	21.5
90°-150°	2572.0	44.3
90°-180°	3033.0	52.3
0°-180°	5799.7	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	15	17	21	17	9
95°	47	64	37	37	42	45
105°	121	178	643	816	539	128
115°	202	242	555	1144	1336	201
125°	283	321	523	908	1071	252
135°	345	383	522	746	856	266
145°	409	443	525	650	719	257
155°	479	496	536	589	617	220
165°	532	539	550	564	574	149
175°	560	564	560	557	553	53
180°	560	560	560	560	560	

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CATALOG NUMBER: OMN4DIP-SR4F0-75D75U835-CLBOOB-1DUDD-WW

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	16.5	16.8	16.2	14.2
90°	11.7	15.2	17.1	20.6	17.3
92.5°	24.2	23.7	24.2	29.2	28.7
95°	46.6	64.2	36.6	36.9	42.1
97.5°	66.5	111.9	213.6	64.4	54.5
100°	82.0	135.7	420.8	125.7	82.7
102.5°	97.6	155.3	567.4	325.0	177.2
105°	121.0	177.9	642.8	816.4	539.1
107.5°	146.0	187.2	613.9	1187.4	1110.7
110°	161.6	201.3	597.0	1247.6	1339.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.5	218.2	580.1	1212.4	1367.2
115°	202.2	241.9	554.7	1144.2	1335.5
117.5°	227.9	267.3	548.4	1070.3	1267.1
120°	246.3	284.2	537.1	1014.1	1219.2
122.5°	260.4	299.8	521.7	965.8	1154.4
125°	283.4	321.3	523.0	907.5	1071.2
127.5°	302.2	342.1	522.1	839.4	1001.5
130°	313.4	354.8	524.9	792.8	947.9
132.5°	324.9	366.2	522.2	772.5	900.0
135°	345.3	383.2	521.5	746.0	856.3
137.5°	362.9	403.6	521.5	716.8	811.2
140°	377.0	414.9	521.5	699.7	785.8
142.5°	391.1	426.3	524.3	679.8	760.4
145°	408.8	443.2	525.0	649.9	718.8
147.5°	429.9	460.2	529.3	628.4	681.5
150°	444.0	471.6	532.1	614.2	658.9
152.5°	458.1	482.9	532.1	602.7	639.2
155°	479.2	496.5	535.6	589.1	616.7
157.5°	496.1	512.7	539.8	580.5	600.4
160°	507.4	521.2	542.7	574.8	592.0
162.5°	515.9	529.7	545.5	571.8	583.5
165°	532.1	539.0	549.7	564.0	574.4
167.5°	541.2	547.5	553.2	560.4	566.6
170°	549.7	553.2	553.2	560.4	563.8
172.5°	552.5	558.7	556.0	557.5	561.0
175°	560.3	563.7	560.3	556.7	553.2
177.5°	560.3	563.0	560.3	560.2	557.5
180°	560.3	560.3	560.3	560.3	560.3

(END OF REPORT)