

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P645118

Luminaire Tested: OMN4DIP-SR4F0-75D25U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645118  
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-SR4F0-75D25U835-CLBOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

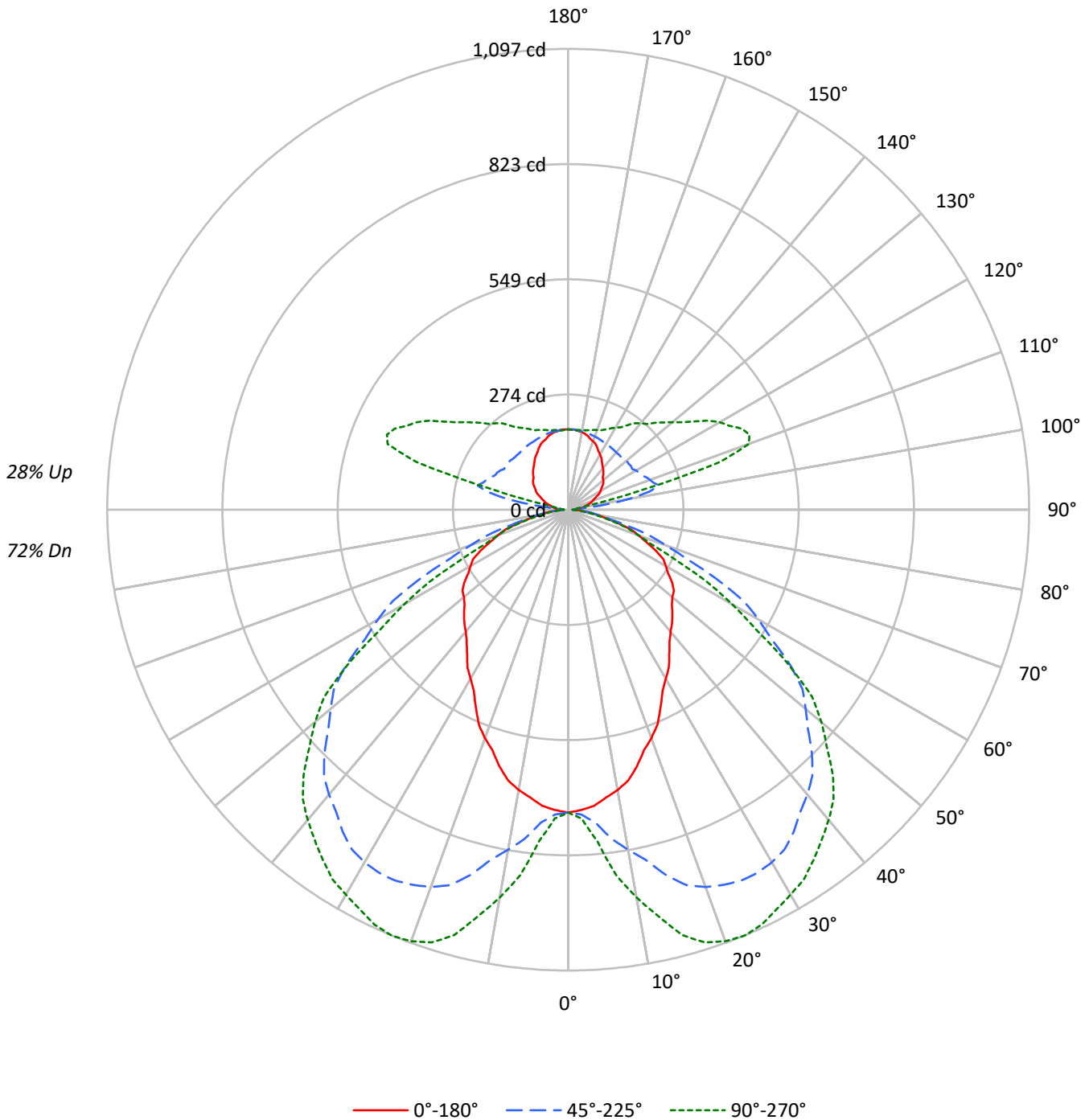
Lumens per Lamp: N/A  
Luminaire Lumens: 3816.9 lumens  
Efficiency: N/A  
Efficacy: 126.8 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 30.1  
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	0
RCR																		
0	112	112	112	112	107	107	107	107	96	96	96	86	86	86	77	77	77	72
1	103	99	95	91	98	94	90	87	84	82	79	76	74	72	68	67	65	61
2	94	86	80	74	89	82	76	71	74	70	66	67	63	60	60	57	55	51
3	85	76	68	62	81	72	65	60	65	60	55	59	54	51	53	50	47	43
4	78	67	59	52	74	64	56	50	58	52	47	52	47	43	47	43	40	37
5	72	59	51	45	68	57	49	43	52	45	40	47	41	37	42	38	35	32
6	66	53	45	39	62	51	43	37	46	40	35	42	37	33	38	34	30	28
7	61	48	40	34	58	46	38	33	42	35	31	38	33	29	35	30	27	24
8	57	44	35	30	53	42	34	29	38	32	27	35	29	25	32	27	24	21
9	53	40	32	27	50	38	31	26	35	29	24	32	27	23	29	25	21	19
10	49	36	29	24	47	35	28	23	32	26	22	29	24	20	27	22	19	17

**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	1.9
10°-20°	245.8	6.4
20°-30°	408.3	10.7
30°-40°	515.0	13.5
40°-50°	550.6	14.4
50°-60°	485.9	12.7
60°-70°	311.9	8.2
70°-80°	138.3	3.6
80°-90°	36.3	1.0
90°-100°	32.9	0.9
100°-110°	173.6	4.5
110°-120°	232.1	6.1
120°-130°	188.1	4.9
130°-140°	149.3	3.9
140°-150°	117.4	3.1
150°-160°	85.9	2.2
160°-170°	53.3	1.4
170°-180°	18.2	0.5
0°-30°	728.0	19.1
0°-40°	1243.0	32.6
0°-60°	2279.5	59.7
0°-90°	2766.0	72.5
90°-120°	438.7	11.5
90°-150°	893.5	23.4
90°-180°	1051.0	27.5
0°-180°	3816.9	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	13	12	14	10	8
95°	28	30	18	16	17	24
105°	49	67	223	280	184	52
115°	75	87	193	392	456	74
125°	100	113	182	311	366	89
135°	118	131	178	255	292	91
145°	140	151	179	222	245	88
155°	164	170	183	201	211	75
165°	182	184	188	193	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	



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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	16.1	15.9	14.8	12.8
90°	11.7	12.9	12.5	13.6	10.3
92.5°	18.6	15.9	14.0	14.8	12.4
95°	28.1	29.7	18.0	15.9	16.6
97.5°	33.5	45.8	77.1	24.2	19.7
100°	38.0	53.0	147.0	45.1	29.3
102.5°	42.4	59.7	197.1	112.3	60.7
105°	49.0	67.4	222.8	279.8	184.1
107.5°	57.4	69.5	212.9	406.5	379.2
110°	61.8	74.3	207.2	427.1	457.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	67.6	80.1	201.4	415.1	466.8
115°	74.6	87.0	192.7	391.8	456.0
117.5°	83.1	95.7	190.6	366.5	432.7
120°	88.5	101.5	186.7	347.3	416.3
122.5°	93.3	105.9	180.6	330.9	394.2
125°	100.1	113.0	181.9	310.9	365.8
127.5°	105.4	119.9	180.5	287.5	341.9
130°	109.2	123.3	181.4	270.7	323.7
132.5°	111.4	125.5	178.7	263.8	307.3
135°	117.9	130.9	178.1	254.7	292.4
137.5°	123.9	137.8	178.1	244.7	277.0
140°	128.7	141.7	178.1	238.9	268.3
142.5°	133.6	145.6	179.0	232.1	259.6
145°	139.6	151.3	179.3	221.9	245.4
147.5°	146.8	157.1	180.7	214.6	232.7
150°	151.6	161.0	181.7	209.7	225.0
152.5°	156.4	164.9	181.7	205.8	218.3
155°	163.6	169.5	182.9	201.1	210.6
157.5°	169.4	175.1	184.3	198.2	205.0
160°	173.3	178.0	185.3	196.2	202.1
162.5°	176.1	180.8	186.3	195.2	199.2
165°	181.7	184.0	187.7	192.6	196.1
167.5°	184.8	186.9	188.9	191.4	193.5
170°	187.7	188.9	188.9	191.3	192.5
172.5°	188.7	190.8	189.9	190.4	191.5
175°	191.3	192.5	191.3	190.1	188.9
177.5°	191.3	192.2	191.3	191.3	190.3
180°	191.3	191.3	191.3	191.3	191.3

(END OF REPORT)