

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: P645114

Luminaire Tested: OMN4DIP-SR4F0-75D25U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645114  
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-SR4F0-75D25U830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

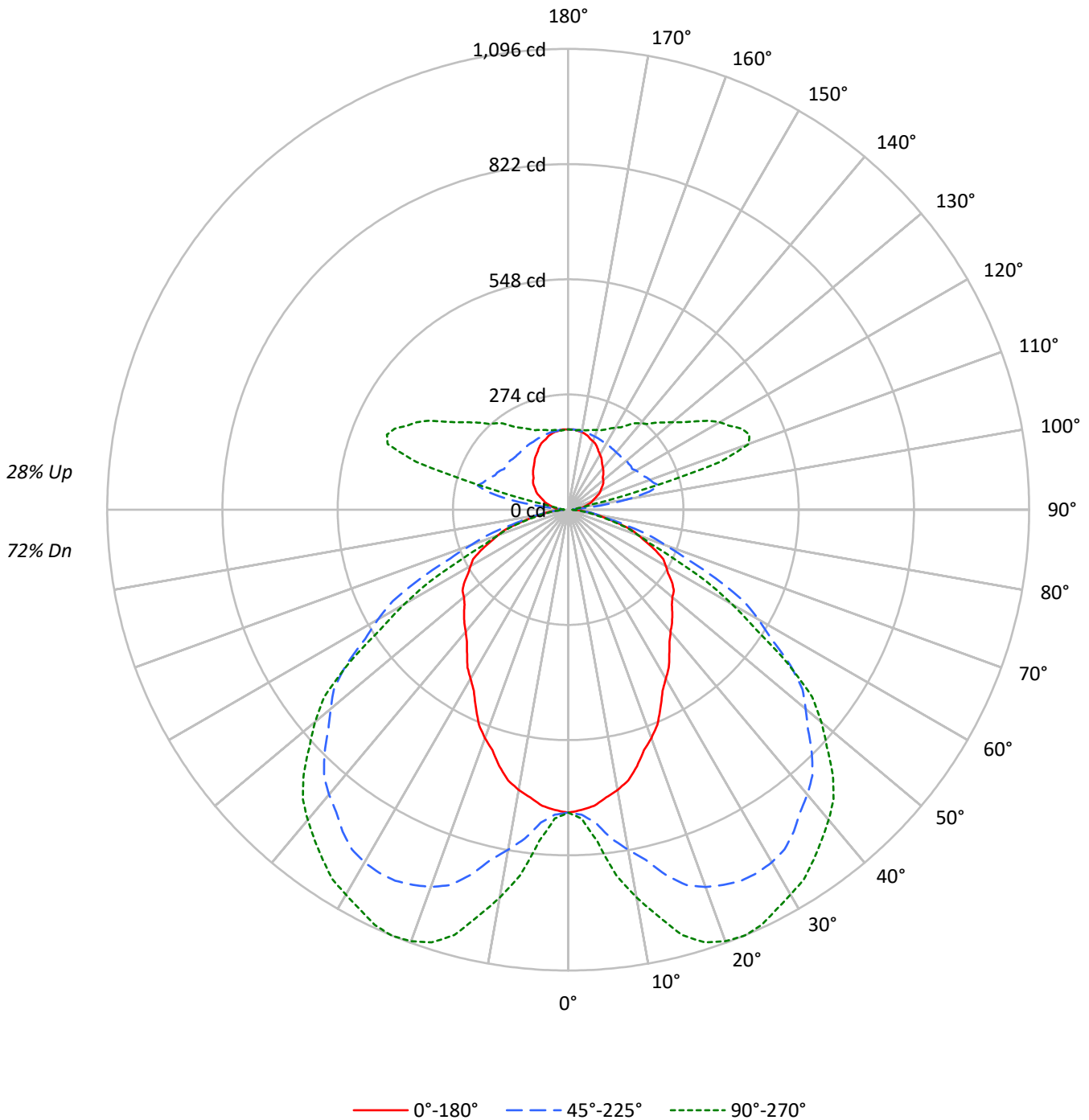
Lumens per Lamp: N/A  
Luminaire Lumens: 3813.4 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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°	11631	11631	11631
5°	11459	12110	12817
10°	11096	13459	15354
15°	10557	15039	17503
20°	9931	16407	18768
25°	9253	17341	19400
30°	8652	18053	19708
35°	8255	18425	20044
40°	7980	18645	20303
45°	7994	18705	20313
50°	8121	18515	19736
55°	8490	18156	17920
60°	8657	16879	14554
65°	8768	14785	10690
70°	8384	11627	8304
75°	7523	8677	6999
80°	6388	6853	5607
85°	6206	5595	4650

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 20313 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.9	1.9
10°-20°	245.5	6.4
20°-30°	407.9	10.7
30°-40°	514.6	13.5
40°-50°	550.1	14.4
50°-60°	485.5	12.7
60°-70°	311.6	8.2
70°-80°	138.2	3.6
80°-90°	36.2	1.0
90°-100°	32.9	0.9
100°-110°	173.5	4.5
110°-120°	231.9	6.1
120°-130°	188.0	4.9
130°-140°	149.1	3.9
140°-150°	117.3	3.1
150°-160°	85.8	2.2
160°-170°	53.3	1.4
170°-180°	18.2	0.5
0°-30°	727.3	19.1
0°-40°	1241.9	32.6
0°-60°	2277.4	59.7
0°-90°	2763.5	72.5
90°-120°	438.3	11.5
90°-150°	892.7	23.4
90°-180°	1050.0	27.5
0°-180°	3813.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	707	728	747	773	791	66
15°	632	728	900	1008	1047	177
25°	519	704	973	1064	1089	239
35°	419	643	935	996	1017	263
45°	350	550	819	870	890	271
55°	302	433	645	648	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°	74	87	193	391	456	74
125°	100	113	182	311	365	89
135°	118	131	178	254	292	91
145°	139	151	179	222	245	88
155°	164	169	183	201	210	75
165°	182	184	188	192	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°	720.4	720.4	720.4	720.4	720.4
2.5°	715.0	725.5	725.8	729.9	735.1
5°	707.0	728.3	747.2	772.7	790.8
7.5°	690.2	728.2	788.7	848.1	877.5
10°	676.8	729.3	820.9	900.5	936.5
12.5°	659.4	728.9	853.1	948.8	990.1
15°	631.6	728.2	899.7	1007.8	1047.1
17.5°	599.4	725.2	936.2	1044.5	1078.9
20°	578.0	722.1	954.9	1057.9	1092.3
22.5°	553.9	715.1	965.7	1064.6	1096.3
25°	519.4	704.5	973.4	1064.4	1089.0
27.5°	485.5	689.3	973.7	1050.9	1071.9
30°	464.1	677.0	968.3	1037.5	1057.1
32.5°	445.3	663.5	957.6	1021.4	1042.4
35°	418.8	643.3	934.8	995.6	1016.9
37.5°	396.0	620.1	906.0	965.2	990.1
40°	378.6	601.4	884.6	943.7	963.3
42.5°	365.2	581.5	859.1	916.8	933.8
45°	350.1	550.0	819.2	869.9	889.6
47.5°	334.1	517.5	773.3	821.2	834.0
50°	323.3	493.7	737.1	780.8	785.7
52.5°	316.6	468.7	702.3	729.8	730.8
55°	301.6	432.6	645.0	648.1	636.6
57.5°	281.5	390.6	572.3	555.9	528.4
60°	268.1	361.4	522.7	490.0	450.7
62.5°	254.7	333.6	470.4	417.5	371.6
65°	229.5	290.1	387.0	314.2	279.8
67.5°	200.4	242.3	303.9	235.0	212.1
70°	177.6	210.3	246.3	192.3	175.9
72.5°	156.1	178.4	199.4	159.0	150.4
75°	120.6	133.7	139.1	118.8	112.2
77.5°	88.8	89.4	96.5	83.7	80.4
80°	68.7	65.4	73.7	63.6	60.3
82.5°	52.6	48.0	53.6	46.2	44.2
85°	33.5	28.6	30.2	26.8	25.1
87.5°	19.8	16.1	15.9	14.7	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°	28.0	29.7	18.0	15.9	16.6
97.5°	33.5	45.7	77.0	24.2	19.7
100°	37.9	53.0	146.9	45.1	29.3
102.5°	42.3	59.7	196.9	112.2	60.7
105°	49.0	67.3	222.6	279.6	183.9
107.5°	57.3	69.4	212.7	406.2	378.9
110°	61.7	74.2	207.0	426.7	456.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	67.5	80.0	201.2	414.7	466.4
115°	74.5	87.0	192.6	391.4	455.6
117.5°	83.1	95.6	190.4	366.2	432.3
120°	88.4	101.4	186.5	347.0	415.9
122.5°	93.3	105.8	180.4	330.6	393.8
125°	100.0	112.9	181.7	310.7	365.4
127.5°	105.3	119.8	180.3	287.2	341.6
130°	109.1	123.2	181.3	270.5	323.4
132.5°	111.3	125.4	178.6	263.5	307.0
135°	117.8	130.7	177.9	254.5	292.1
137.5°	123.8	137.7	177.9	244.5	276.7
140°	128.6	141.6	177.9	238.7	268.1
142.5°	133.4	145.4	178.9	231.9	259.4
145°	139.4	151.2	179.1	221.7	245.2
147.5°	146.7	157.0	180.6	214.4	232.5
150°	151.5	160.9	181.5	209.5	224.8
152.5°	156.3	164.7	181.5	205.6	218.1
155°	163.5	169.4	182.7	201.0	210.4
157.5°	169.3	174.9	184.2	198.0	204.8
160°	173.1	177.8	185.1	196.1	201.9
162.5°	176.0	180.7	186.1	195.1	199.1
165°	181.5	183.9	187.5	192.4	195.9
167.5°	184.6	186.8	188.7	191.2	193.3
170°	187.5	188.7	188.7	191.2	192.3
172.5°	188.5	190.6	189.7	190.2	191.4
175°	191.1	192.3	191.1	189.9	188.7
177.5°	191.1	192.1	191.1	191.1	190.2
180°	191.1	191.1	191.1	191.1	191.1

(END OF REPORT)