

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: P644574

Luminaire Tested: OMN4DIP-SR4F0-100D25U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644574  
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-SR4F0-100D25U830-CLBOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

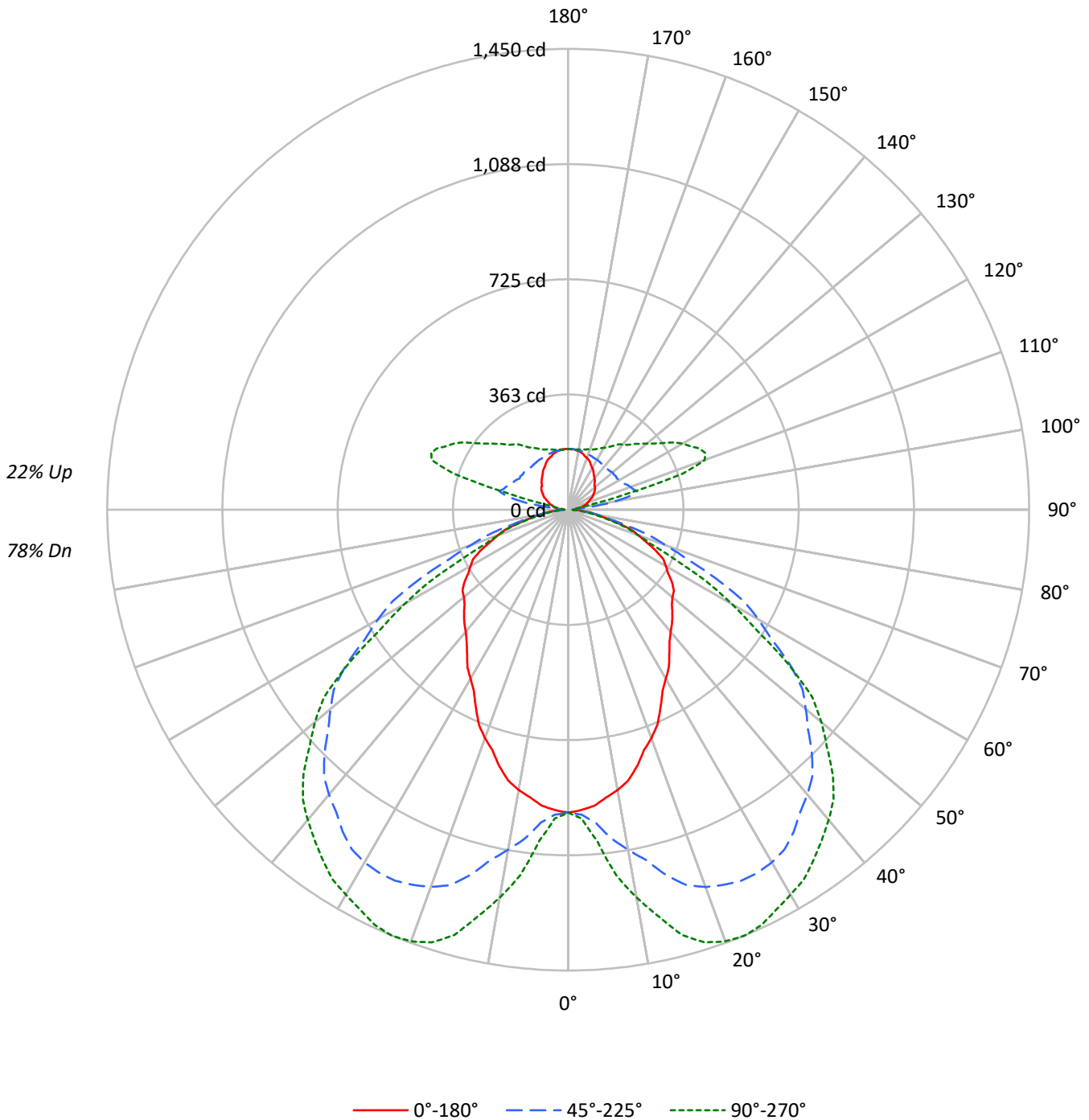
Lumens per Lamp: N/A  
Luminaire Lumens: 4713.6 lumens  
Efficiency: N/A  
Efficacy: 123.4 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 38.2  
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	114	114	114	114	108	108	108	108	99	99	99		90	90	90		81	81	81	78
1	104	100	96	92	99	95	92	89	87	84	82		79	77	75		72	71	69	66
2	95	87	81	75	90	83	78	73	76	72	68		70	66	63		64	61	58	55
3	86	76	69	63	82	73	66	61	67	61	57		61	57	53		56	53	49	46
4	79	68	59	53	75	65	57	51	60	53	48		55	49	45		50	46	42	39
5	72	60	52	45	69	58	50	44	53	47	41		49	43	39		45	40	37	34
6	67	54	45	39	63	52	44	38	48	41	36		44	38	34		41	36	32	30
7	62	49	40	34	59	47	39	33	43	37	32		40	34	30		37	32	28	26
8	57	44	36	30	54	43	35	30	39	33	28		36	31	27		34	29	25	23
9	53	40	32	27	51	39	31	26	36	30	25		33	28	24		31	26	23	21
10	50	37	29	24	47	36	28	24	33	27	23		31	25	21		29	24	20	18

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15389	15389	15389
5°	15161	16023	16956
10°	14682	17807	20315
15°	13969	19896	23158
20°	13139	21710	24831
25°	12241	22942	25668
30°	11447	23886	26077
35°	10924	24380	26520
40°	10560	24668	26863
45°	10579	24749	26875
50°	10746	24498	26113
55°	11232	24023	23710
60°	11454	22333	19256
65°	11603	19561	14143
70°	11094	15380	10985
75°	9956	11478	9264
80°	8452	9066	7420
85°	8207	7392	6150

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 26875 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.7	2.1
10°-20°	324.9	6.9
20°-30°	539.7	11.4
30°-40°	680.8	14.4
40°-50°	727.8	15.4
50°-60°	642.4	13.6
60°-70°	412.3	8.7
70°-80°	182.8	3.9
80°-90°	47.8	1.0
90°-100°	36.0	0.8
100°-110°	175.4	3.7
110°-120°	233.4	5.0
120°-130°	188.9	4.0
130°-140°	149.2	3.2
140°-150°	117.3	2.5
150°-160°	85.8	1.8
160°-170°	53.3	1.1
170°-180°	18.2	0.4
0°-30°	962.3	20.4
0°-40°	1643.1	34.9
0°-60°	3013.3	63.9
0°-90°	3656.1	77.6
90°-120°	444.8	9.4
90°-150°	900.2	19.1
90°-180°	1057.0	22.4
0°-180°	4713.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	953	953	953	953	953	
5°	935	964	989	1022	1046	88
15°	836	964	1190	1333	1385	234
25°	687	932	1288	1408	1441	316
35°	554	851	1237	1317	1346	348
45°	463	728	1084	1151	1177	358
55°	399	572	853	858	842	354
65°	304	384	512	416	370	297
75°	160	177	184	157	148	170
85°	44	38	40	35	33	47
90°	16	17	16	17	12	11
95°	34	34	21	18	18	29
105°	53	71	224	280	184	57
115°	77	89	194	392	456	77
125°	102	114	183	311	365	90
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°	953.1	953.1	953.1	953.1	953.1
2.5°	946.0	959.9	960.2	965.7	972.6
5°	935.4	963.6	988.6	1022.4	1046.2
7.5°	913.2	963.5	1043.6	1122.0	1161.1
10°	895.5	964.9	1086.1	1191.4	1239.1
12.5°	872.5	964.4	1128.7	1255.4	1310.0
15°	835.7	963.5	1190.3	1333.4	1385.4
17.5°	793.1	959.6	1238.6	1382.0	1427.5
20°	764.7	955.5	1263.5	1399.7	1445.2
22.5°	732.8	946.1	1277.6	1408.5	1450.5
25°	687.1	932.1	1287.8	1408.3	1440.8
27.5°	642.4	912.0	1288.3	1390.4	1418.2
30°	614.0	895.8	1281.2	1372.7	1398.7
32.5°	589.2	877.9	1267.0	1351.4	1379.2
35°	554.2	851.1	1236.9	1317.3	1345.5
37.5°	524.0	820.5	1198.7	1277.1	1310.0
40°	501.0	795.7	1170.4	1248.5	1274.5
42.5°	483.2	769.3	1136.7	1213.0	1235.5
45°	463.3	727.7	1083.9	1151.0	1177.0
47.5°	442.0	684.7	1023.2	1086.5	1103.4
50°	427.8	653.2	975.3	1033.1	1039.6
52.5°	418.9	620.1	929.2	965.6	966.9
55°	399.0	572.4	853.4	857.5	842.3
57.5°	372.4	516.7	757.2	735.5	699.1
60°	354.7	478.2	691.6	648.3	596.3
62.5°	336.9	441.4	622.4	552.3	491.6
65°	303.7	383.9	512.0	415.7	370.2
67.5°	265.1	320.6	402.1	311.0	280.6
70°	235.0	278.3	325.8	254.4	232.7
72.5°	206.6	236.1	263.8	210.3	199.1
75°	159.6	176.9	184.0	157.2	148.5
77.5°	117.5	118.3	127.7	110.7	106.4
80°	90.9	86.5	97.5	84.1	79.8
82.5°	69.6	63.5	70.9	61.1	58.5
85°	44.3	37.8	39.9	35.4	33.2
87.5°	26.2	21.2	20.9	19.3	16.7
90°	15.5	16.7	15.7	16.8	12.5
92.5°	23.7	19.7	16.8	17.1	13.7
95°	34.0	33.6	20.7	17.5	17.7
97.5°	38.8	49.5	79.1	25.2	20.2
100°	42.8	56.3	148.5	46.1	29.9
102.5°	46.8	62.9	198.5	112.8	60.8
105°	52.8	70.6	224.2	280.1	183.9
107.5°	61.0	72.1	214.4	406.7	378.9
110°	65.0	76.9	208.6	427.2	456.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	70.8	82.7	202.8	415.2	466.4
115°	77.2	89.1	194.2	391.9	455.6
117.5°	85.6	97.8	192.0	366.7	432.3
120°	90.6	103.5	188.2	347.6	415.9
122.5°	95.4	107.6	181.6	331.1	393.8
125°	101.6	114.5	183.4	311.2	365.4
127.5°	106.4	121.3	181.4	287.7	341.6
130°	110.2	124.3	182.3	270.5	323.4
132.5°	111.5	125.6	178.8	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)