

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: P645116

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

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645116  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: OMN4DIP-SR4F0-75D25U830-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

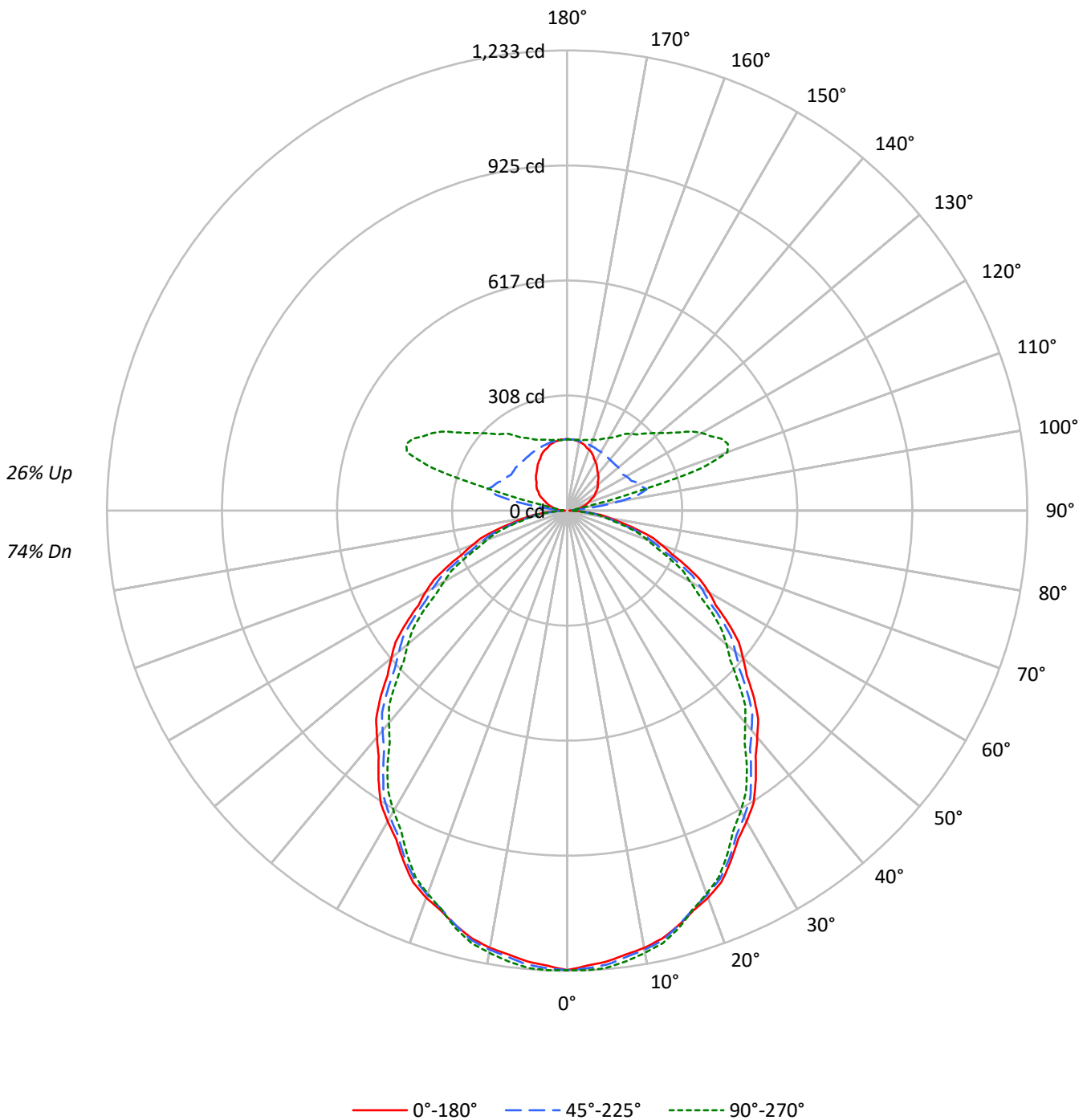
Lumens per Lamp: N/A  
Luminaire Lumens: 4030.7 lumens  
Efficiency: N/A  
Efficacy: 133.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78	74																												
1	103	99	95	91	98	94	90	87	85	82	80	77	75	73	69	68	66	63																												
2	94	87	80	75	89	82	77	72	75	70	66	68	64	61	61	59	56	53																												
3	86	76	69	63	81	73	66	60	66	61	56	60	56	52	54	51	48	45																												
4	79	68	60	53	75	65	57	52	59	53	48	54	49	45	49	45	42	39																												
5	73	61	52	46	69	58	50	45	53	47	42	48	43	39	44	40	36	34																												
6	67	55	46	40	64	52	45	39	48	41	37	44	39	34	40	36	32	30																												
7	62	50	41	35	59	47	40	34	44	37	33	40	35	31	37	32	29	26																												
8	58	45	37	32	55	43	36	31	40	34	29	37	31	27	34	29	26	24																												
9	54	41	34	28	51	40	33	28	37	31	26	34	29	25	31	27	23	21																												
10	51	38	31	26	48	37	30	25	34	28	24	31	26	23	29	25	21	19																												

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

	0°	45°	90°
0°	19882	19882	19882
5°	19658	19794	19930
10°	19502	19584	19721
15°	19239	19239	19351
20°	18969	18826	18768
25°	18474	18326	18088
30°	17928	17678	17335
35°	17369	16939	16543
40°	16701	16208	15643
45°	16143	15531	14767
50°	15443	14770	14014
55°	14854	14100	13253
60°	14173	13417	12281
65°	13440	12481	11522
70°	12732	11547	10754
75°	11915	10555	10031
80°	10907	9661	9186
85°	10244	9003	8373

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16143 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.8	2.9
10°-20°	325.1	8.1
20°-30°	472.6	11.7
30°-40°	537.6	13.3
40°-50°	524.2	13.0
50°-60°	447.4	11.1
60°-70°	325.2	8.1
70°-80°	183.9	4.6
80°-90°	57.1	1.4
90°-100°	30.6	0.8
100°-110°	171.4	4.3
110°-120°	229.8	5.7
120°-130°	186.4	4.6
130°-140°	149.0	3.7
140°-150°	117.3	2.9
150°-160°	85.8	2.1
160°-170°	53.3	1.3
170°-180°	18.2	0.5
0°-30°	913.5	22.7
0°-40°	1451.1	36.0
0°-60°	2422.8	60.1
0°-90°	2988.9	74.2
90°-120°	431.9	10.7
90°-150°	884.6	21.9
90°-180°	1042.0	25.9
0°-180°	4030.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1213	1231	1221	1220	1230	115
15°	1151	1166	1151	1150	1158	324
25°	1037	1047	1029	1010	1015	477
35°	881	884	859	839	839	550
45°	707	704	680	656	647	544
55°	528	526	501	477	471	471
65°	352	348	327	306	302	349
75°	191	184	169	162	161	203
85°	55	49	49	47	45	59
90°	7	10	12	12	12	7
95°	23	25	15	16	17	21
105°	46	62	221	280	184	49
115°	71	84	189	390	456	71
125°	98	111	178	309	365	87
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°	1231.4	1231.4	1231.4	1231.4	1231.4
2.5°	1220.6	1236.4	1227.3	1227.5	1232.7
5°	1212.9	1231.0	1221.3	1219.9	1229.7
7.5°	1200.2	1217.9	1206.6	1204.9	1217.6
10°	1189.5	1205.9	1194.5	1191.4	1202.9
12.5°	1174.7	1191.1	1179.8	1175.3	1186.8
15°	1151.0	1165.7	1151.0	1149.5	1157.7
17.5°	1124.1	1136.9	1119.8	1114.2	1120.5
20°	1104.0	1115.5	1095.7	1087.4	1092.3
22.5°	1078.6	1090.0	1068.9	1056.6	1062.8
25°	1037.0	1046.9	1028.7	1010.3	1015.3
27.5°	992.5	1000.0	981.7	963.0	964.7
30°	961.6	966.6	948.2	928.2	929.8
32.5°	929.5	933.1	913.4	892.0	892.3
35°	881.2	884.5	859.4	839.3	839.3
37.5°	830.0	831.9	805.2	783.3	781.0
40°	792.4	795.7	769.0	747.1	742.2
42.5°	757.6	758.2	734.1	712.2	706.0
45°	707.0	703.7	680.2	656.5	646.7
47.5°	652.4	652.4	625.6	601.9	592.7
50°	614.8	614.8	588.0	564.4	557.9
52.5°	580.0	578.7	553.2	529.5	520.4
55°	527.7	526.1	500.9	477.3	470.8
57.5°	472.4	472.4	449.0	423.7	416.5
60°	438.9	438.9	415.5	390.1	380.3
62.5°	402.8	401.4	378.0	355.4	349.5
65°	351.8	348.5	326.7	306.5	301.6
67.5°	303.2	300.0	276.8	260.6	257.3
70°	269.7	266.5	244.6	231.1	227.8
72.5°	237.6	233.0	213.8	203.0	199.7
75°	191.0	184.4	169.2	162.5	160.8
77.5°	146.8	135.6	129.3	124.6	123.0
80°	117.3	107.4	103.9	100.5	98.8
82.5°	91.8	82.0	81.1	79.0	77.4
85°	55.3	48.7	48.6	46.9	45.2
87.5°	24.1	20.8	21.3	21.2	21.2
90°	6.7	9.5	12.5	12.0	12.0
92.5°	14.9	12.5	12.7	14.5	14.1
95°	23.0	24.7	14.6	15.9	16.6
97.5°	28.8	41.0	75.4	23.8	19.7
100°	34.6	49.6	145.2	43.4	29.3
102.5°	39.0	55.0	195.2	111.8	60.7
105°	45.6	62.3	220.9	279.6	183.9
107.5°	54.0	66.1	211.1	406.2	378.9
110°	58.4	70.9	205.3	426.7	456.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	64.2	76.6	199.5	414.7	466.4
115°	71.1	83.6	189.2	389.8	455.6
117.5°	80.0	92.3	187.0	364.6	432.3
120°	86.8	98.1	183.2	345.4	415.9
122.5°	90.2	103.8	178.4	328.9	393.8
125°	98.3	111.2	178.4	309.0	365.4
127.5°	103.6	118.1	178.6	285.9	341.6
130°	107.5	121.6	179.6	270.5	323.4
132.5°	110.9	125.0	178.2	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)