

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: P645201

Luminaire Tested: OMN4DIP-SR4F0-75D75U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645201  
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-SR4F0-75D75U940-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

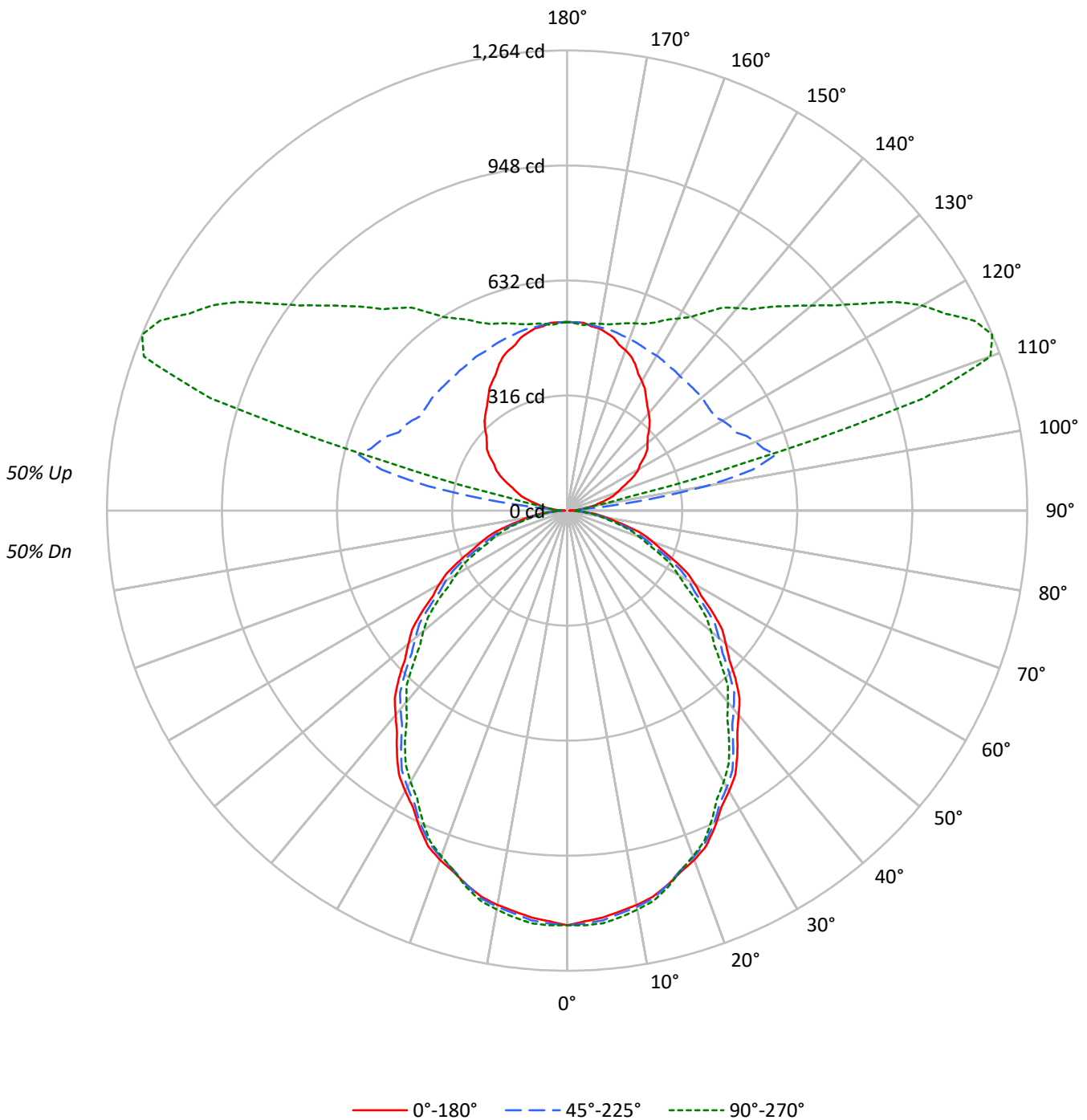
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5560.9 lumens  
Efficiency: N/A  
Efficacy: 130.5 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: 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	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	49	48	47	42				
2	89	82	76	70	82	76	70	66	64	60	57	53	51	48	44	42	40	35				
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	39	36	34	30				
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	30	26				
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	31	28	26	23				
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16				
9	50	38	31	26	47	36	29	24	31	26	22	26	22	19	22	19	16	14				
10	47	35	28	23	44	33	26	22	29	23	20	24	20	17	21	17	15	13				

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

	0°	45°	90°
0°	18390	18390	18390
5°	18185	18310	18436
10°	18039	18115	18243
15°	17795	17795	17899
20°	17546	17414	17361
25°	17090	16951	16730
30°	16583	16352	16035
35°	16066	15670	15303
40°	15449	14992	14469
45°	14933	14367	13659
50°	14285	13662	12961
55°	13743	13044	12259
60°	13110	12410	11360
65°	12432	11545	10655
70°	11778	10683	9951
75°	11023	9763	9283
80°	10088	8935	8498
85°	9466	8318	7744

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14933 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.1	1.9
10°-20°	300.7	5.4
20°-30°	437.2	7.9
30°-40°	497.3	8.9
40°-50°	484.9	8.7
50°-60°	413.9	7.4
60°-70°	300.8	5.4
70°-80°	170.1	3.1
80°-90°	53.5	1.0
90°-100°	70.3	1.3
100°-110°	457.3	8.2
110°-120°	618.1	11.1
120°-130°	502.6	9.0
130°-140°	403.3	7.3
140°-150°	317.8	5.7
150°-160°	232.4	4.2
160°-170°	144.4	2.6
170°-180°	49.2	0.9
0°-30°	845.0	15.2
0°-40°	1342.3	24.1
0°-60°	2241.1	40.3
0°-90°	2765.5	49.7
90°-120°	1145.7	20.6
90°-150°	2369.4	42.6
90°-180°	2795.0	50.3
0°-180°	5560.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1139	1139	1139	1139	1139	
5°	1122	1139	1130	1128	1138	106
15°	1065	1078	1065	1063	1071	300
25°	959	968	952	935	939	441
35°	815	818	795	776	776	509
45°	654	651	629	607	598	503
55°	488	487	463	442	436	436
65°	325	322	302	284	279	323
75°	177	171	156	150	149	188
85°	51	45	45	43	42	55
90°	6	11	16	18	18	7
95°	38	55	31	34	39	38
105°	109	160	592	754	498	115
115°	184	220	510	1056	1234	183
125°	260	295	480	837	990	231
135°	319	354	482	689	791	246
145°	378	410	485	601	664	237
155°	443	459	495	544	570	203
165°	492	498	508	521	531	138
175°	518	521	518	514	511	49
180°	518	518	518	518	518	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1139.0	1139.0	1139.0	1139.0	1139.0
2.5°	1129.1	1143.7	1135.3	1135.4	1140.3
5°	1122.0	1138.6	1129.7	1128.4	1137.5
7.5°	1110.2	1126.6	1116.1	1114.5	1126.3
10°	1100.3	1115.4	1104.9	1102.1	1112.7
12.5°	1086.6	1101.8	1091.3	1087.2	1097.8
15°	1064.6	1078.3	1064.6	1063.3	1070.8
17.5°	1039.8	1051.7	1035.8	1030.7	1036.4
20°	1021.2	1031.9	1013.5	1005.9	1010.4
22.5°	997.7	1008.3	988.7	977.4	983.1
25°	959.3	968.3	951.5	934.6	939.1
27.5°	918.0	925.0	908.1	890.8	892.3
30°	889.5	894.1	877.1	858.6	860.1
32.5°	859.8	863.1	844.9	825.1	825.4
35°	815.1	818.2	795.0	776.4	776.4
37.5°	767.7	769.5	744.8	724.6	722.5
40°	733.0	736.0	711.3	691.1	686.5
42.5°	700.8	701.4	679.1	658.8	653.0
45°	654.0	650.9	629.2	607.3	598.2
47.5°	603.4	603.4	578.7	556.8	548.3
50°	568.7	568.7	543.9	522.1	516.0
52.5°	536.5	535.3	511.7	489.8	481.3
55°	488.2	486.6	463.4	441.5	435.5
57.5°	437.0	437.0	415.3	391.9	385.3
60°	406.0	406.0	384.3	360.9	351.8
62.5°	372.5	371.3	349.6	328.7	323.3
65°	325.4	322.4	302.2	283.5	278.9
67.5°	280.5	277.5	256.0	241.1	238.0
70°	249.5	246.5	226.3	213.8	210.8
72.5°	219.7	215.5	197.7	187.8	184.7
75°	176.7	170.6	156.5	150.3	148.8
77.5°	135.8	125.4	119.6	115.3	113.7
80°	108.5	99.4	96.1	92.9	91.4
82.5°	84.9	75.8	75.0	73.1	71.6
85°	51.1	45.1	44.9	43.4	41.8
87.5°	22.3	19.6	20.5	20.9	20.9
90°	6.2	10.9	15.8	17.5	17.5
92.5°	19.0	18.8	21.1	26.7	28.1
95°	38.4	54.7	30.7	34.1	38.9
97.5°	57.1	99.0	195.8	59.3	50.4
100°	72.7	122.3	387.4	114.7	76.5
102.5°	87.1	139.2	522.8	300.0	163.8
105°	108.7	159.8	592.5	754.5	498.3
107.5°	131.8	169.9	565.8	1097.4	1026.5
110°	146.2	182.9	550.2	1153.0	1237.5

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	161.9	198.6	534.6	1120.5	1263.5
115°	183.8	220.5	509.6	1055.9	1234.2
117.5°	207.9	243.9	503.7	987.6	1171.1
120°	226.1	259.6	493.3	935.7	1126.8
122.5°	237.9	275.2	480.3	891.1	1066.8
125°	260.4	295.4	480.3	837.2	990.0
127.5°	277.7	314.6	480.9	774.6	925.5
130°	288.1	326.3	483.5	732.7	876.0
132.5°	299.9	338.1	482.3	713.9	831.7
135°	319.1	354.2	482.0	689.4	791.3
137.5°	335.4	373.0	482.0	662.4	749.7
140°	348.5	383.5	482.0	646.6	726.2
142.5°	361.5	394.0	484.6	628.3	702.8
145°	377.8	409.6	485.2	600.7	664.3
147.5°	397.3	425.3	489.1	580.8	629.8
150°	410.3	435.8	491.7	567.6	609.0
152.5°	423.4	446.3	491.7	557.0	590.7
155°	442.9	458.8	495.0	544.4	569.9
157.5°	458.5	473.8	498.9	536.4	554.9
160°	468.9	481.7	501.5	531.2	547.1
162.5°	476.8	489.5	504.1	528.5	539.3
165°	491.7	498.1	508.0	521.3	530.8
167.5°	500.2	505.9	511.3	517.9	523.7
170°	508.0	511.2	511.3	517.9	521.0
172.5°	510.6	516.4	513.9	515.3	518.4
175°	517.8	521.0	517.8	514.5	511.3
177.5°	517.8	520.3	517.8	517.7	515.2
180°	517.8	517.8	517.8	517.8	517.8

(END OF REPORT)