

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: P645171

Luminaire Tested: OMN4DIP-SR4F0-75D50U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645171
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-SR4F0-75D50U940-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

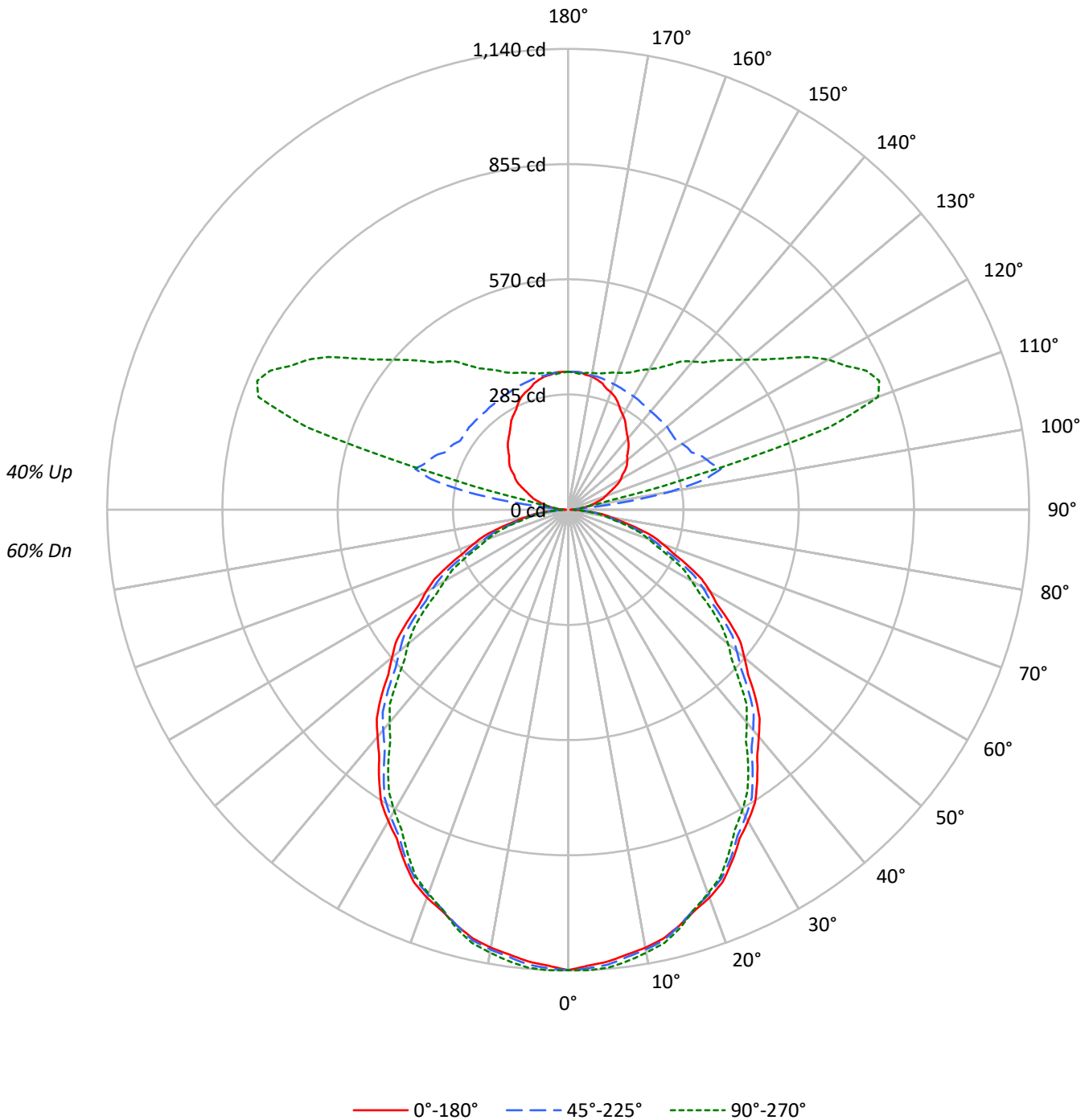
Lumens per Lamp: N/A
Luminaire Lumens: 4611.9 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.4
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										
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	0														
RCR																																						
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60																				
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	56	55	51																				
2	91	84	78	72	85	78	73	68	69	64	61	59	56	54	51	49	47	43																				
3	83	74	66	60	78	69	63	57	61	56	51	53	49	46	45	42	40	36																				
4	76	65	57	51	71	61	54	49	54	48	44	47	43	39	41	37	35	31																				
5	70	58	50	44	65	55	48	42	48	43	38	42	38	34	37	33	30	27																				
6	65	53	44	38	60	49	42	37	44	38	33	38	34	30	33	30	27	24																				
7	60	48	39	34	56	45	38	32	40	34	29	35	30	27	31	27	24	21																				
8	56	43	35	30	52	41	34	29	36	30	26	32	27	24	28	24	21	19																				
9	52	40	32	27	49	37	31	26	33	28	24	30	25	21	26	22	19	17																				
10	49	36	29	24	45	34	28	23	31	25	21	27	23	20	24	20	18	16																				

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	2.3
10°-20°	300.7	6.5
20°-30°	437.2	9.5
30°-40°	497.3	10.8
40°-50°	484.9	10.5
50°-60°	413.9	9.0
60°-70°	300.8	6.5
70°-80°	170.1	3.7
80°-90°	53.1	1.2
90°-100°	48.6	1.1
100°-110°	302.6	6.6
110°-120°	408.1	8.8
120°-130°	331.6	7.2
130°-140°	265.8	5.8
140°-150°	209.4	4.5
150°-160°	153.1	3.3
160°-170°	95.1	2.1
170°-180°	32.4	0.7
0°-30°	845.0	18.3
0°-40°	1342.3	29.1
0°-60°	2241.1	48.6
0°-90°	2765.1	60.0
90°-120°	759.2	16.5
90°-150°	1566.1	34.0
90°-180°	1847.0	40.0
0°-180°	4611.9	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	10	14	14	14	7
95°	30	38	22	24	27	29
105°	74	107	392	498	328	79
115°	123	146	336	696	813	122
125°	173	196	317	552	652	153
135°	210	233	318	454	522	162
145°	249	270	320	396	438	156
155°	292	302	326	359	376	134
165°	324	328	335	344	350	91
175°	341	343	341	339	337	32
180°	341	341	341	341	341	



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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	19.4	20.1	20.2	20.2
90°	6.2	9.8	13.6	14.2	14.2
92.5°	16.3	15.1	16.3	19.8	20.3
95°	29.6	38.2	21.8	24.0	26.7
97.5°	41.3	67.4	130.5	40.0	33.7
100°	51.6	82.7	256.3	76.1	50.9
102.5°	60.7	93.5	345.6	198.2	108.0
105°	74.3	106.9	391.5	497.7	328.3
107.5°	89.4	113.5	373.9	723.6	676.4
110°	98.5	122.1	363.6	760.3	815.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	108.8	132.4	353.3	738.9	832.6
115°	122.7	146.3	336.3	695.8	813.3
117.5°	138.6	161.8	332.4	650.8	771.7
120°	150.6	172.1	325.6	616.6	742.5
122.5°	157.9	182.4	317.0	587.2	703.0
125°	172.6	195.7	317.0	551.6	652.4
127.5°	183.5	208.2	317.4	510.4	609.9
130°	190.4	215.6	319.1	482.8	577.2
132.5°	197.7	222.9	317.9	470.4	548.1
135°	210.3	233.4	317.6	454.3	521.5
137.5°	221.0	245.8	317.6	436.5	494.0
140°	229.6	252.7	317.6	426.1	478.5
142.5°	238.2	259.6	319.3	414.0	463.1
145°	248.9	269.9	319.7	395.8	437.8
147.5°	261.8	280.3	322.3	382.7	415.0
150°	270.4	287.2	324.0	374.0	401.3
152.5°	279.0	294.1	324.0	367.0	389.3
155°	291.8	302.3	326.2	358.7	375.5
157.5°	302.1	312.2	328.8	353.5	365.7
160°	309.0	317.4	330.5	350.0	360.5
162.5°	314.2	322.6	332.2	348.2	355.4
165°	324.0	328.2	334.8	343.5	349.8
167.5°	329.6	333.4	336.9	341.3	345.1
170°	334.8	336.9	336.9	341.2	343.3
172.5°	336.5	340.3	338.6	339.5	341.6
175°	341.2	343.3	341.2	339.0	336.9
177.5°	341.2	342.9	341.2	341.2	339.5
180°	341.2	341.2	341.2	341.2	341.2

(END OF REPORT)