

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: P644746

Luminaire Tested: OMN4DIP-SR4F0-125D150U935-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644746
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-27)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-125D150U935-WBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - WHITE BAFFLE WITH MEDIUM OPTIC - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

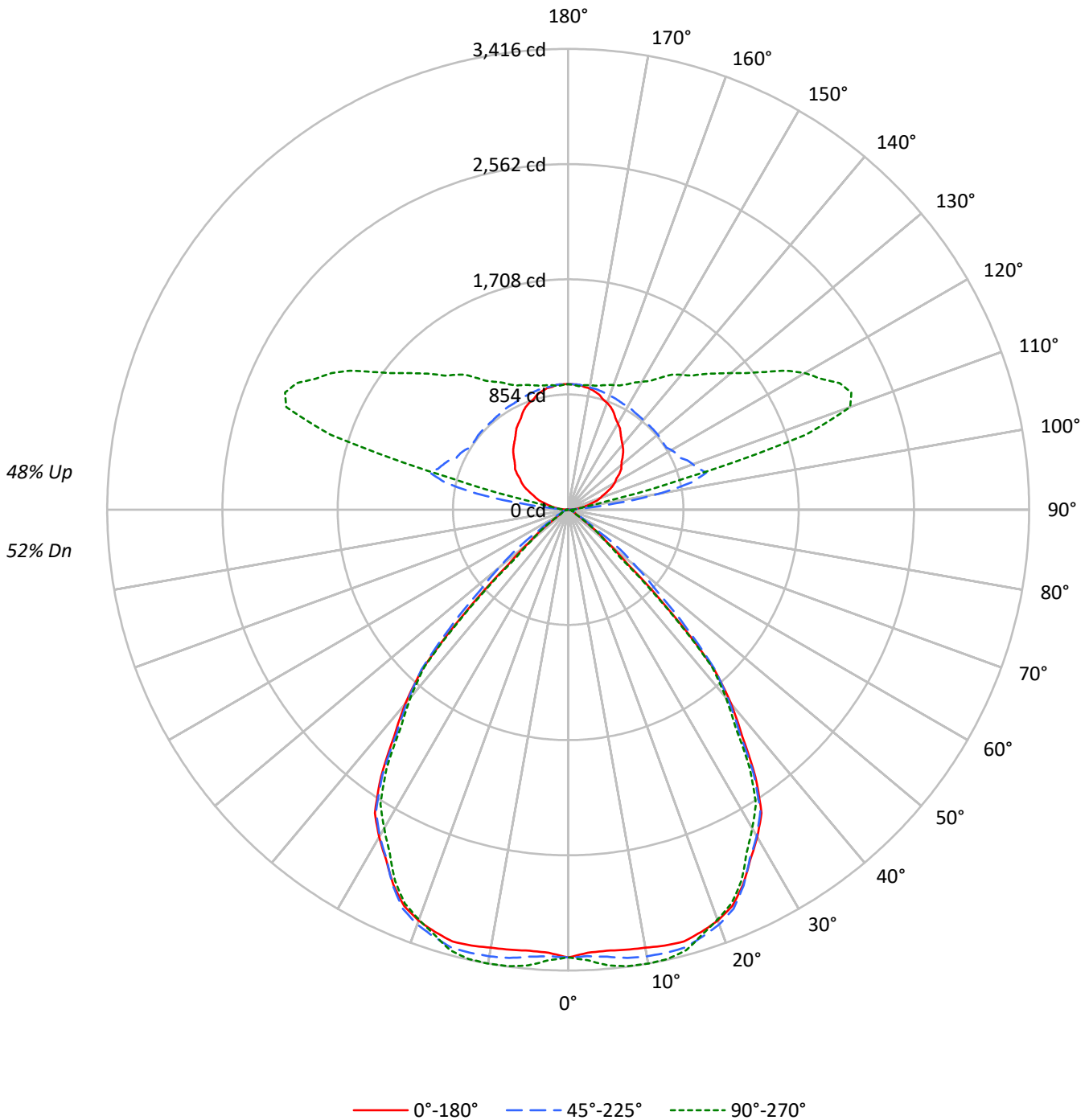
Lumens per Lamp: N/A
Luminaire Lumens: 10337.8 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 98.1
Input Voltage (V): 120
Input Current (A_{in}): 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	0																			
RCR																																														
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52																												
1	100	96	93	90	92	89	87	84	77	75	73	65	63	62	54	53	52	47																												
2	93	86	81	77	86	81	76	72	69	66	64	59	57	55	50	48	47	43																												
3	86	78	72	67	80	73	67	63	63	59	56	54	51	49	46	44	42	39																												
4	80	70	63	58	74	66	60	55	57	53	49	50	46	44	42	40	38	35																												
5	74	64	57	51	69	60	54	49	52	48	44	46	42	39	39	37	35	32																												
6	69	58	51	46	64	55	48	44	48	43	39	42	38	35	36	34	32	29																												
7	64	53	46	41	60	50	44	39	44	39	36	39	35	32	34	31	29	26																												
8	60	49	42	37	56	46	40	35	41	36	32	36	32	29	31	29	26	24																												
9	56	45	38	33	52	42	36	32	38	33	29	33	30	27	29	26	24	22																												
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	21																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42868	42868	42868
5°	42546	43129	43972
10°	43234	44087	44808
15°	44313	44915	45216
20°	44555	44968	44452
25°	43702	43809	43275
30°	41784	41672	40666
35°	38147	37832	37043
40°	31688	31226	30636
45°	19904	22644	18990
50°	7634	13409	7081
55°	3601	5628	3657
60°	1744	2842	1550
65°	1605	1681	1452
70°	1605	1605	1416
75°	1622	1622	1372
80°	1674	1488	1302
85°	1853	1482	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 22644 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.7	3.1
10°-20°	945.5	9.1
20°-30°	1404.6	13.6
30°-40°	1470.1	14.2
40°-50°	890.4	8.6
50°-60°	205.5	2.0
60°-70°	56.5	0.5
70°-80°	33.1	0.3
80°-90°	13.5	0.1
90°-100°	114.4	1.1
100°-110°	815.3	7.9
110°-120°	1106.9	10.7
120°-130°	900.9	8.7
130°-140°	724.6	7.0
140°-150°	571.2	5.5
150°-160°	417.7	4.0
160°-170°	259.4	2.5
170°-180°	88.5	0.9
0°-30°	2669.7	25.8
0°-40°	4139.8	40.0
0°-60°	5235.7	50.6
0°-90°	5338.8	51.6
90°-120°	2036.7	19.7
90°-150°	4233.4	41.0
90°-180°	4999.0	48.4
0°-180°	10337.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3319	3319	3319	3319	3319	
5°	3281	3357	3326	3340	3391	314
15°	3314	3414	3359	3332	3381	933
25°	3066	3157	3074	2995	3036	1404
35°	2419	2456	2399	2344	2349	1487
45°	1090	1239	1240	1196	1040	837
55°	160	182	250	172	162	166
65°	52	55	55	50	48	53
75°	32	32	32	30	28	34
85°	12	12	10	10	8	12
90°	0	6	12	18	18	3
95°	47	87	47	53	64	52
105°	181	279	1059	1353	896	191
115°	322	391	913	1898	2218	320
125°	462	525	860	1505	1779	411
135°	574	636	866	1239	1422	441
145°	679	736	872	1080	1194	426
155°	796	825	890	978	1024	365
165°	884	895	913	937	954	248
175°	931	936	931	925	919	88
180°	931	931	931	931	931	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3318.8	3318.8	3318.8	3318.8	3318.8
2.5°	3286.8	3345.5	3312.8	3315.5	3342.8
5°	3281.3	3357.1	3326.3	3340.0	3391.3
7.5°	3290.3	3369.5	3351.3	3356.1	3412.3
10°	3296.3	3379.4	3361.3	3360.1	3416.3
12.5°	3310.3	3397.3	3363.3	3356.1	3410.3
15°	3313.8	3414.0	3358.8	3332.4	3381.3
17.5°	3281.3	3391.8	3317.3	3262.7	3301.8
20°	3241.4	3353.8	3271.4	3194.8	3233.9
22.5°	3179.4	3289.8	3201.4	3118.8	3159.9
25°	3066.4	3156.8	3073.9	2994.9	3036.4
27.5°	2923.5	2987.0	2916.0	2841.0	2864.5
30°	2801.5	2865.1	2794.0	2716.8	2726.5
32.5°	2665.6	2719.3	2650.1	2580.8	2588.6
35°	2419.2	2455.8	2399.2	2344.3	2349.2
37.5°	2119.3	2124.1	2085.8	2035.8	2036.8
40°	1879.3	1894.0	1851.9	1812.0	1816.9
42.5°	1593.4	1651.1	1609.9	1574.0	1574.9
45°	1089.6	1238.7	1239.6	1196.0	1039.6
47.5°	601.8	774.3	885.2	686.4	518.3
50°	379.9	489.8	667.3	401.2	352.4
52.5°	271.9	321.3	487.3	283.8	258.4
55°	159.9	181.9	249.9	172.2	162.4
57.5°	97.5	116.5	145.9	115.1	98.0
60°	67.5	84.6	110.0	77.1	60.0
62.5°	59.5	64.9	86.0	61.4	56.0
65°	52.5	54.9	55.0	49.9	47.5
67.5°	46.5	48.9	46.5	43.9	41.5
70°	42.5	44.9	42.5	39.9	37.5
72.5°	38.5	40.9	38.5	35.9	33.5
75°	32.5	32.5	32.5	29.9	27.5
77.5°	26.5	26.5	26.0	23.9	21.5
80°	22.5	22.5	20.0	19.9	17.5
82.5°	18.5	18.5	16.0	15.9	13.5
85°	12.5	12.5	10.0	9.9	7.5
87.5°	6.0	7.1	6.3	7.5	5.5
90°	0.0	5.7	11.7	17.6	17.6
92.5°	14.0	19.8	25.8	36.4	41.0
95°	46.8	86.9	46.8	52.9	64.4
97.5°	83.1	166.7	344.2	101.5	87.8
100°	111.2	208.5	690.6	203.3	134.6
102.5°	139.3	241.2	934.1	536.5	293.8
105°	181.4	278.7	1059.4	1353.3	895.5
107.5°	223.6	296.8	1011.4	1969.6	1844.8
110°	251.7	320.4	983.3	2069.6	2224.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	279.8	348.4	955.2	2011.1	2270.9
115°	321.9	390.6	913.1	1897.8	2218.3
117.5°	365.2	432.8	902.5	1775.1	2104.7
120°	398.0	461.0	883.8	1681.7	2025.1
122.5°	421.4	488.9	860.4	1601.5	1917.4
125°	462.4	525.3	860.4	1504.6	1779.3
127.5°	496.3	560.4	861.6	1392.1	1663.4
130°	515.1	583.7	866.2	1316.9	1574.4
132.5°	538.5	607.1	866.2	1283.1	1494.8
135°	573.6	636.5	866.2	1239.1	1422.3
137.5°	602.9	670.4	866.2	1190.5	1347.3
140°	626.3	689.2	866.2	1162.1	1305.2
142.5°	649.7	708.0	870.9	1129.1	1263.1
145°	678.9	736.2	872.1	1079.5	1194.0
147.5°	714.1	764.4	879.1	1043.8	1132.0
150°	737.5	783.3	883.8	1020.1	1094.5
152.5°	760.9	802.1	883.8	1001.1	1061.7
155°	796.0	824.6	889.6	978.5	1024.3
157.5°	824.1	851.6	896.7	964.1	997.3
160°	842.8	865.7	901.4	954.7	983.3
162.5°	856.9	879.8	906.0	949.8	969.2
165°	883.8	895.2	913.1	936.9	954.0
167.5°	899.0	909.3	918.9	930.9	941.2
170°	913.1	918.8	918.9	930.7	936.5
172.5°	917.7	928.0	923.6	926.1	931.8
175°	930.6	936.3	930.6	924.6	918.9
177.5°	930.6	935.2	930.6	930.5	925.9
180°	930.6	930.6	930.6	930.6	930.6

(END OF REPORT)