

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: P644686

Luminaire Tested: OMN4DIP-SR4F0-125D100U935-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644686
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-SR4F0-125D100U935-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 - 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

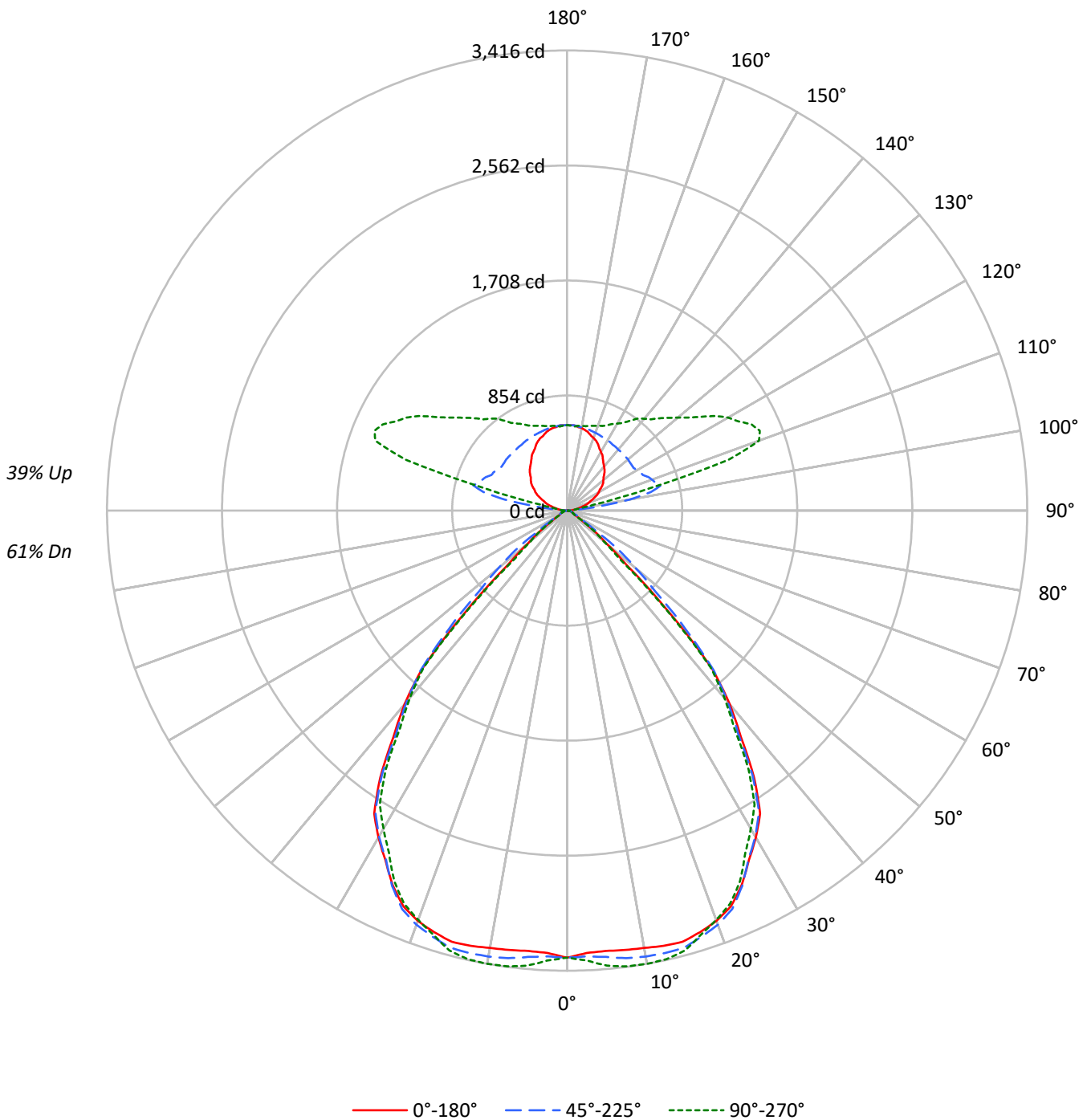
Lumens per Lamp: N/A
Luminaire Lumens: 8744.8 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 78.5
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									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	103	103	103	103	89	89	89	77	77	77	66	66	66	66	66	66	66	66	66	61													
1	102	99	96	93	96	93	90	88	82	80	78	71	70	69	62	61	60	60	60	60	60	60	60	56													
2	95	89	84	80	89	84	80	76	74	71	68	66	63	61	57	56	54	54	54	54	54	54	54	50													
3	88	80	74	69	83	76	71	66	68	64	60	60	57	55	53	51	49	49	49	49	49	49	49	46													
4	82	73	66	61	77	69	63	59	62	57	54	55	52	49	49	46	44	44	44	44	44	44	44	41													
5	76	66	59	54	72	63	57	52	57	52	48	51	47	44	45	43	40	40	40	40	40	40	40	38													
6	71	61	53	48	67	58	51	47	52	47	43	47	43	40	42	39	37	37	37	37	37	37	37	34													
7	66	55	48	43	63	53	46	42	48	43	39	43	39	36	39	36	33	33	33	33	33	33	33	31													
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	31	31	31	31	31	31	29													
9	58	47	40	36	55	45	39	35	41	36	32	37	33	30	34	31	28	28	28	28	28	28	28	26													
10	55	44	37	32	52	42	36	32	38	33	30	35	31	28	32	28	26	26	26	26	26	26	26	24													

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	3.7
10°-20°	945.5	10.8
20°-30°	1404.6	16.1
30°-40°	1470.1	16.8
40°-50°	890.4	10.2
50°-60°	205.5	2.3
60°-70°	56.5	0.6
70°-80°	33.1	0.4
80°-90°	12.9	0.1
90°-100°	78.0	0.9
100°-110°	555.6	6.4
110°-120°	754.3	8.6
120°-130°	613.9	7.0
130°-140°	493.8	5.6
140°-150°	389.3	4.5
150°-160°	284.7	3.3
160°-170°	176.8	2.0
170°-180°	60.3	0.7
0°-30°	2669.7	30.5
0°-40°	4139.8	47.3
0°-60°	5235.7	59.9
0°-90°	5338.1	61.0
90°-120°	1387.9	15.9
90°-150°	2884.9	33.0
90°-180°	3407.0	39.0
0°-180°	8744.8	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	4	8	12	12	2
95°	32	59	32	36	44	36
105°	124	190	722	922	610	130
115°	219	266	622	1293	1512	218
125°	315	358	586	1025	1212	280
135°	391	434	590	844	969	301
145°	463	502	594	736	814	291
155°	542	562	606	667	698	249
165°	602	610	622	638	650	169
175°	634	638	634	630	626	60
180°	634	634	634	634	634	



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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	6.8	5.6	6.3	4.4
90°	0.0	3.9	8.0	12.0	12.0
92.5°	9.6	13.5	17.5	24.8	27.9
95°	31.9	59.2	31.9	36.1	43.9
97.5°	56.6	113.6	234.5	69.2	59.8
100°	75.8	142.1	470.7	138.5	91.7
102.5°	94.9	164.3	636.6	365.6	200.2
105°	123.6	189.9	721.9	922.3	610.3
107.5°	152.4	202.3	689.2	1342.2	1257.2
110°	171.5	218.3	670.1	1410.4	1515.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	190.7	237.5	650.9	1370.5	1547.6
115°	219.4	266.2	622.2	1293.3	1511.7
117.5°	248.9	294.9	615.0	1209.7	1434.3
120°	271.2	314.1	602.3	1146.1	1380.1
122.5°	287.2	333.2	586.3	1091.4	1306.7
125°	315.1	358.0	586.3	1025.3	1212.5
127.5°	338.2	381.9	587.1	948.7	1133.6
130°	351.0	397.8	590.3	897.4	1072.9
132.5°	367.0	413.8	590.3	874.4	1018.7
135°	390.9	433.8	590.3	844.4	969.2
137.5°	410.8	456.8	590.3	811.3	918.2
140°	426.8	469.7	590.3	792.0	889.5
142.5°	442.7	482.5	593.5	769.5	860.7
145°	462.7	501.7	594.3	735.7	813.7
147.5°	486.6	520.9	599.1	711.3	771.4
150°	502.6	533.8	602.3	695.2	745.9
152.5°	518.5	546.6	602.3	682.2	723.5
155°	542.5	562.0	606.3	666.8	698.0
157.5°	561.6	580.3	611.1	657.0	679.7
160°	574.4	590.0	614.2	650.6	670.1
162.5°	583.9	599.5	617.4	647.3	660.5
165°	602.3	610.1	622.2	638.4	650.1
167.5°	612.7	619.7	626.2	634.4	641.4
170°	622.2	626.1	626.2	634.3	638.2
172.5°	625.4	632.4	629.4	631.1	635.0
175°	634.2	638.1	634.2	630.1	626.2
177.5°	634.2	637.3	634.2	634.1	631.0
180°	634.2	634.2	634.2	634.2	634.2

(END OF REPORT)