

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: P644836

Luminaire Tested: OMN4DIP-SR4F0-125D75U935-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644836
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-SR4F0-125D75U935-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 - 750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

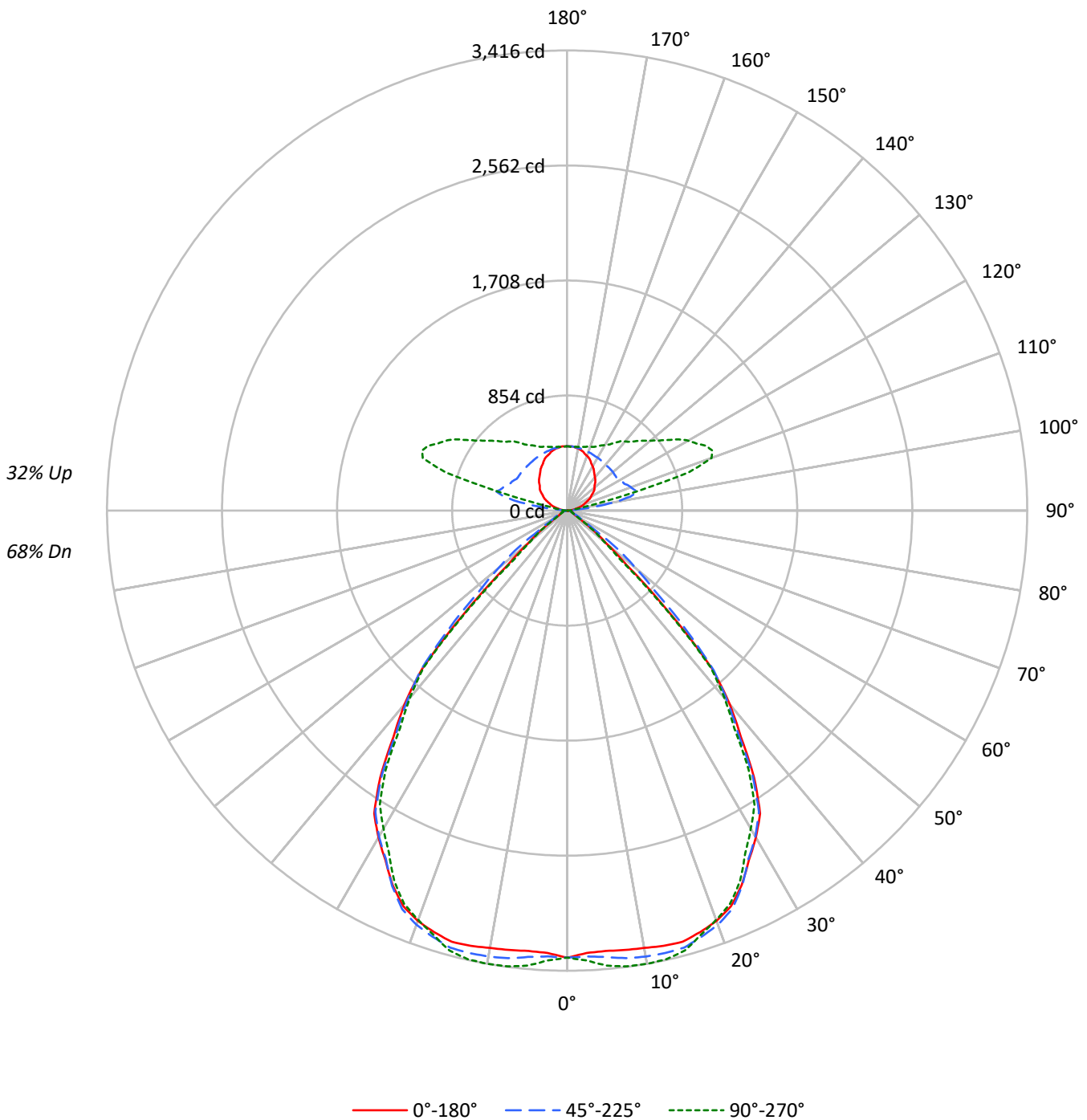
Lumens per Lamp: N/A
Luminaire Lumens: 7902.5 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 70.3
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	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	68				
1	104	101	97	95	98	95	93	90	85	83	81	76	75	73	68	67	66	62				
2	97	91	86	82	92	86	82	78	78	74	72	70	67	65	63	61	59	56				
3	90	82	76	71	85	78	73	69	71	67	63	64	61	58	58	56	54	50				
4	84	75	68	63	79	71	65	61	65	60	57	59	55	53	54	51	49	46				
5	78	68	61	56	74	65	59	54	60	55	51	54	50	47	50	47	44	42				
6	73	62	55	50	69	60	53	49	55	50	46	50	46	43	46	43	40	38				
7	68	57	50	45	65	55	48	44	51	45	41	47	42	39	43	39	37	35				
8	64	53	46	41	61	51	44	40	47	42	38	43	39	36	40	36	34	32				
9	60	49	42	37	57	47	41	36	43	38	35	40	36	33	37	34	31	29				
10	56	45	38	34	54	44	37	33	40	35	32	38	33	30	35	31	29	27				

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	4.0
10°-20°	945.5	12.0
20°-30°	1404.6	17.8
30°-40°	1470.1	18.6
40°-50°	890.4	11.3
50°-60°	205.5	2.6
60°-70°	56.5	0.7
70°-80°	33.1	0.4
80°-90°	12.5	0.2
90°-100°	58.7	0.7
100°-110°	418.3	5.3
110°-120°	567.9	7.2
120°-130°	462.2	5.8
130°-140°	371.7	4.7
140°-150°	293.1	3.7
150°-160°	214.3	2.7
160°-170°	133.1	1.7
170°-180°	45.4	0.6
0°-30°	2669.7	33.8
0°-40°	4139.8	52.4
0°-60°	5235.7	66.3
0°-90°	5337.7	67.5
90°-120°	1044.9	13.2
90°-150°	2171.9	27.5
90°-180°	2565.0	32.5
0°-180°	7902.5	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	3	6	9	9	2
95°	24	45	24	27	33	27
105°	93	143	544	694	459	98
115°	165	200	468	974	1138	164
125°	237	270	441	772	913	211
135°	294	327	444	636	730	226
145°	348	378	447	554	613	219
155°	408	423	456	502	526	187
165°	453	459	468	481	490	127
175°	478	480	478	474	471	45
180°	478	478	478	478	478	



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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	6.6	5.2	5.8	3.8
90°	0.0	2.9	6.0	9.0	9.0
92.5°	7.2	10.1	13.2	18.7	21.0
95°	24.0	44.6	24.0	27.2	33.0
97.5°	42.6	85.5	176.6	52.1	45.0
100°	57.1	107.0	354.3	104.3	69.1
102.5°	71.5	123.7	479.3	275.2	150.7
105°	93.1	143.0	543.5	694.3	459.4
107.5°	114.7	152.3	518.9	1010.5	946.5
110°	129.1	164.4	504.5	1061.8	1141.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	143.5	178.8	490.1	1031.8	1165.1
115°	165.2	200.4	468.4	973.7	1138.1
117.5°	187.4	222.0	463.0	910.7	1079.8
120°	204.2	236.5	453.4	862.8	1039.0
122.5°	216.2	250.9	441.4	821.7	983.7
125°	237.2	269.5	441.4	771.9	912.9
127.5°	254.6	287.5	442.0	714.2	853.4
130°	264.3	299.5	444.4	675.6	807.8
132.5°	276.3	311.5	444.4	658.3	766.9
135°	294.3	326.6	444.4	635.7	729.7
137.5°	309.3	343.9	444.4	610.8	691.3
140°	321.3	353.6	444.4	596.2	669.6
142.5°	333.3	363.3	446.8	579.3	648.0
145°	348.3	377.7	447.4	553.9	612.6
147.5°	366.3	392.2	451.0	535.5	580.8
150°	378.4	401.8	453.4	523.4	561.5
152.5°	390.4	411.5	453.4	513.6	544.7
155°	408.4	423.1	456.4	502.0	525.5
157.5°	422.8	436.9	460.0	494.7	511.7
160°	432.4	444.2	462.4	489.8	504.5
162.5°	439.6	451.4	464.8	487.3	497.3
165°	453.4	459.3	468.4	480.7	489.5
167.5°	461.2	466.5	471.4	477.6	482.9
170°	468.4	471.4	471.4	477.5	480.5
172.5°	470.8	476.1	473.8	475.1	478.1
175°	477.5	480.4	477.5	474.4	471.4
177.5°	477.5	479.8	477.5	477.4	475.1
180°	477.5	477.5	477.5	477.5	477.5

(END OF REPORT)