

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: P645217

Luminaire Tested: OMN4DP-SR4F0-100D940-BBM-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P645217
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-23)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DP-SR4F0-100D940-BBM-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - BLACK BAFFLE WITH MEDIUM OPTIC - 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

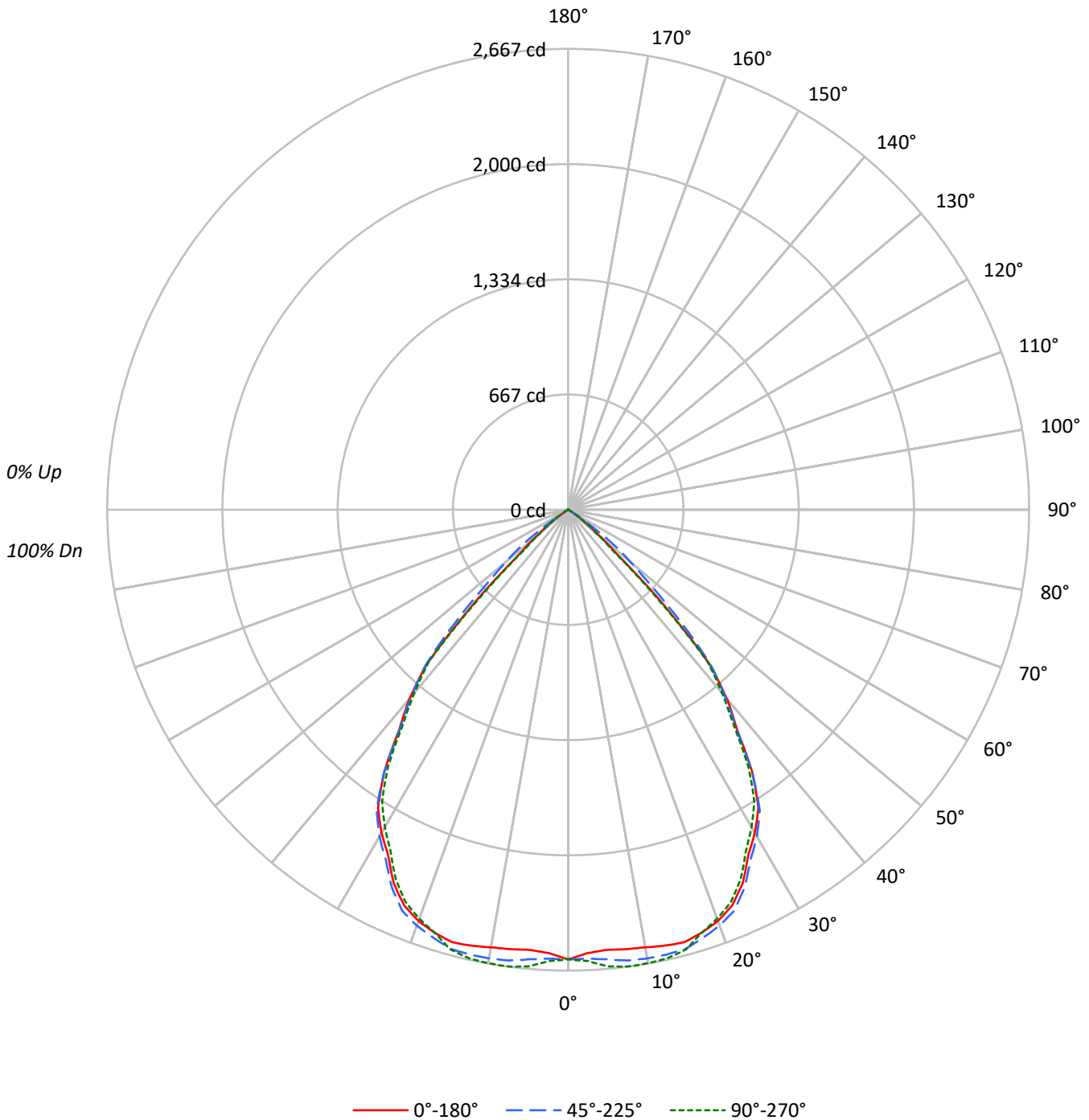
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3996.7 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 38.1
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	113	110	107	105	110	108	105	103	103	102	100	100	98	97	96	95	94				92	
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86				84	
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78				76	
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71				69	
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65				63	
6	83	73	66	61	81	72	65	61	70	64	60	69	64	60	67	63	59				58	
7	78	67	60	56	76	66	60	55	65	59	55	64	59	55	63	58	54				53	
8	73	62	56	51	72	62	55	51	61	55	51	59	54	50	58	54	50				49	
9	69	58	51	47	68	58	51	47	57	51	47	56	50	46	55	50	46				45	
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43				41	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33609	33609	33609
5°	33158	33869	34396
10°	33728	34580	34953
15°	34659	35175	35230
20°	34816	35208	34621
25°	34015	34392	33639
30°	32204	32567	31629
35°	29274	29274	28665
40°	24077	23837	23325
45°	14396	16919	13728
50°	4654	9429	4367
55°	1646	3157	1646
60°	106	891	52
65°	61	61	0
70°	76	0	0
75°	0	0	0
80°	0	0	0
85°	296	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 16919 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	6.3
10°-20°	740.7	18.5
20°-30°	1096.2	27.4
30°-40°	1133.0	28.3
40°-50°	659.2	16.5
50°-60°	111.7	2.8
60°-70°	4.4	0.1
70°-80°	0.6	0.0
80°-90°	0.6	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2087.2	52.2
0°-40°	3220.2	80.6
0°-60°	3991.1	99.9
0°-90°	3996.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3996.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2602	2602	2602	2602	2602	
5°	2557	2625	2612	2619	2653	245
15°	2592	2683	2630	2617	2634	729
25°	2387	2466	2413	2340	2360	1090
35°	1856	1886	1856	1810	1818	1137
45°	788	917	926	894	752	609
55°	73	85	140	79	73	81
65°	2	2	2	0	0	2
75°	0	2	0	0	0	1
85°	2	2	0	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2602.0	2602.0	2602.0	2602.0	2602.0
2.5°	2567.8	2618.7	2600.3	2602.3	2615.0
5°	2557.3	2624.8	2612.1	2619.0	2652.8
7.5°	2565.0	2633.3	2631.6	2633.6	2666.6
10°	2571.5	2643.0	2636.5	2635.2	2664.9
12.5°	2584.5	2662.4	2636.5	2633.4	2658.4
15°	2591.8	2683.2	2630.4	2616.6	2634.5
17.5°	2567.0	2668.7	2597.1	2560.3	2567.4
20°	2532.9	2636.2	2561.4	2506.8	2518.7
22.5°	2479.3	2577.8	2511.0	2443.5	2458.6
25°	2386.7	2466.1	2413.1	2340.4	2360.3
27.5°	2255.0	2317.8	2284.3	2213.9	2226.2
30°	2159.2	2210.8	2183.5	2114.6	2120.6
32.5°	2048.7	2092.4	2063.3	2004.0	2003.6
35°	1856.5	1886.3	1856.5	1810.0	1817.9
37.5°	1605.1	1627.7	1597.3	1569.4	1573.4
40°	1427.9	1445.8	1413.7	1387.2	1383.3
42.5°	1206.9	1256.6	1225.2	1189.2	1194.8
45°	788.1	917.2	926.2	894.5	751.5
47.5°	397.3	538.3	644.7	489.2	350.6
50°	231.6	317.0	469.2	259.0	217.3
52.5°	151.9	188.1	327.8	163.7	144.2
55°	73.1	85.0	140.2	79.1	73.1
57.5°	25.2	38.7	62.2	39.5	28.0
60°	4.1	16.0	34.5	12.0	2.0
62.5°	2.4	4.8	21.5	2.4	0.4
65°	2.0	2.0	2.0	0.0	0.0
67.5°	2.0	2.0	0.0	0.0	0.0
70°	2.0	2.0	0.0	0.0	0.0
72.5°	2.0	2.0	0.0	0.0	0.0
75°	0.0	2.0	0.0	0.0	0.0
77.5°	0.0	2.0	0.0	0.0	0.0
80°	0.0	2.0	0.0	0.0	0.0
82.5°	0.0	2.0	0.0	0.0	0.0
85°	2.0	2.0	0.0	0.0	0.0
87.5°	1.6	1.6	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)