

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: P645220

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

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P645220
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-27)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DP-SR4F0-100D940-WBM-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - WHITE BAFFLE WITH MEDIUM OPTIC - 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

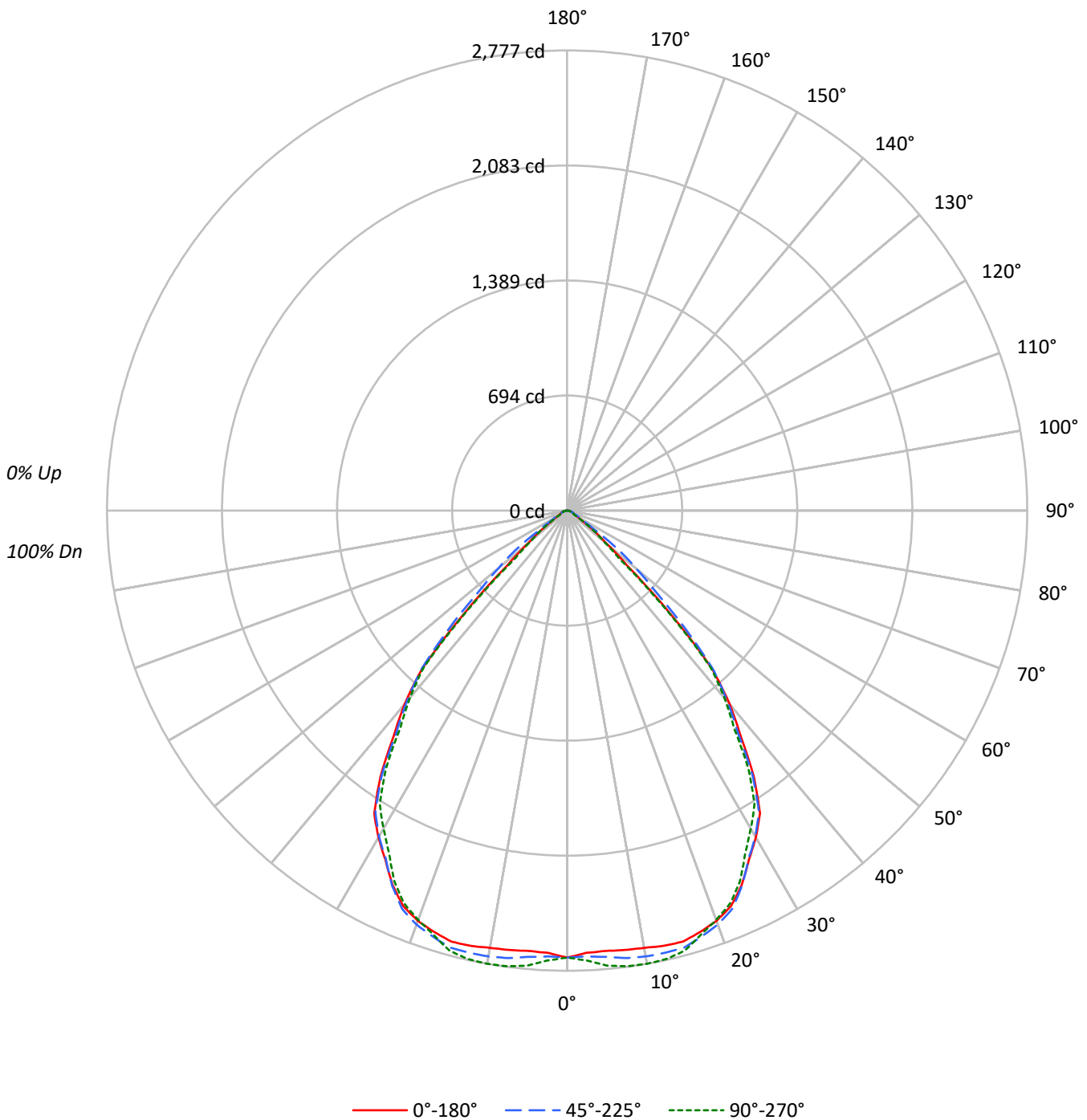
Lumens per Lamp: N/A
Luminaire Lumens: 4337.5 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Direct

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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91				91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83				83
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	82	79	77	75				75
4	93	84	77	72	91	83	77	72	81	75	71	78	74	70	76	73	69	68				68
5	87	77	70	65	85	76	70	65	74	69	64	73	68	64	71	67	63	62				62
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56				56
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51				51
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47				47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				43
10	64	53	46	42	63	52	46	42	52	46	42	51	45	41	50	45	41	40				40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34842	34842	34842
5°	34580	35054	35738
10°	35140	35833	36419
15°	36017	36505	36750
20°	36213	36547	36129
25°	35520	35607	35173
30°	33961	33870	33052
35°	31004	30748	30107
40°	25756	25378	24899
45°	16177	18404	15436
50°	6203	10897	5755
55°	2928	4574	2973
60°	1416	2310	1258
65°	1305	1366	1180
70°	1303	1303	1152
75°	1318	1318	1113
80°	1361	1205	1056
85°	1512	1200	904

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 18404 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.8	6.0
10°-20°	768.5	17.7
20°-30°	1141.6	26.3
30°-40°	1194.8	27.5
40°-50°	723.7	16.7
50°-60°	167.0	3.8
60°-70°	45.9	1.1
70°-80°	26.9	0.6
80°-90°	9.3	0.2
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°	2169.9	50.0
0°-40°	3364.7	77.6
0°-60°	4255.4	98.1
0°-90°	4337.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4337.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2697	2697	2697	2697	2697	
5°	2667	2728	2704	2715	2756	255
15°	2693	2775	2730	2708	2748	758
25°	2492	2566	2498	2434	2468	1141
35°	1966	1996	1950	1905	1909	1208
45°	886	1007	1008	972	845	680
55°	130	148	203	140	132	135
65°	43	45	45	41	39	43
75°	26	26	26	24	22	28
85°	10	10	8	8	6	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2697.4	2697.4	2697.4	2697.4	2697.4
2.5°	2671.4	2719.1	2692.6	2694.7	2716.9
5°	2667.0	2728.5	2703.5	2714.6	2756.3
7.5°	2674.3	2738.6	2723.8	2727.7	2773.4
10°	2679.2	2746.7	2732.0	2731.0	2776.7
12.5°	2690.5	2761.2	2733.6	2727.7	2771.8
15°	2693.4	2774.8	2729.9	2708.5	2748.2
17.5°	2667.0	2756.7	2696.2	2651.8	2683.6
20°	2634.5	2725.8	2658.8	2596.6	2628.4
22.5°	2584.1	2673.9	2602.0	2534.9	2568.3
25°	2492.3	2565.8	2498.4	2434.1	2467.9
27.5°	2376.1	2427.7	2370.0	2309.1	2328.2
30°	2277.0	2328.6	2270.9	2208.1	2216.0
32.5°	2166.5	2210.2	2153.9	2097.6	2103.9
35°	1966.2	1996.0	1950.0	1905.4	1909.3
37.5°	1722.5	1726.4	1695.2	1654.6	1655.4
40°	1527.5	1539.4	1505.1	1472.7	1476.7
42.5°	1295.1	1342.0	1308.5	1279.3	1280.1
45°	885.6	1006.8	1007.5	972.1	845.0
47.5°	489.1	629.3	719.5	557.9	421.3
50°	308.7	398.1	542.3	326.1	286.4
52.5°	221.0	261.1	396.1	230.7	210.0
55°	130.0	147.9	203.1	140.0	132.0
57.5°	79.2	94.7	118.6	93.5	79.6
60°	54.8	68.7	89.4	62.7	48.7
62.5°	48.3	52.7	69.9	49.9	45.5
65°	42.7	44.6	44.7	40.6	38.6
67.5°	37.8	39.8	37.8	35.7	33.7
70°	34.5	36.5	34.5	32.5	30.5
72.5°	31.3	33.3	31.3	29.2	27.2
75°	26.4	26.4	26.4	24.3	22.3
77.5°	21.5	21.5	21.1	19.5	17.5
80°	18.3	18.3	16.2	16.2	14.2
82.5°	15.0	15.0	13.0	13.0	11.0
85°	10.2	10.2	8.1	8.1	6.1
87.5°	4.9	4.9	3.2	3.2	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)