

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: P645212

Luminaire Tested: OMN4DP-SR4F0-100D930-WBM-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P645212
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-SR4F0-100D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

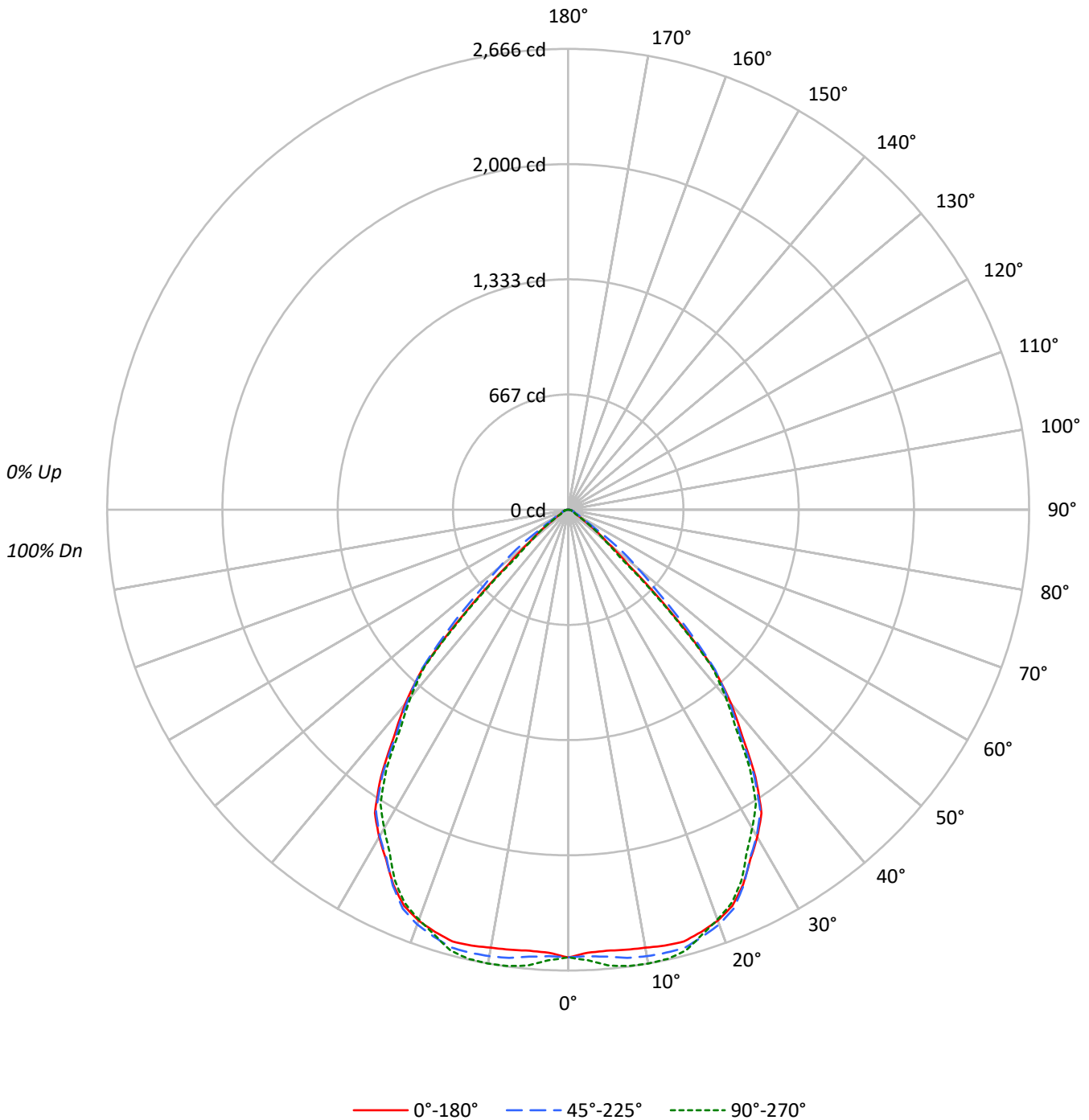
Lumens per Lamp: N/A
Luminaire Lumens: 4164.7 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Direct

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	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°	33454	33454	33454
5°	33202	33657	34315
10°	33740	34405	34967
15°	34582	35052	35286
20°	34770	35091	34690
25°	34105	34188	33772
30°	32609	32521	31736
35°	29769	29523	28908
40°	24729	24368	23908
45°	15532	17670	14820
50°	5956	10463	5526
55°	2810	4391	2855
60°	1361	2217	1209
65°	1253	1311	1134
70°	1254	1254	1107
75°	1268	1268	1073
80°	1309	1160	1019
85°	1452	1156	874

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 17670 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.5	6.0
10°-20°	737.8	17.7
20°-30°	1096.1	26.3
30°-40°	1147.2	27.5
40°-50°	694.9	16.7
50°-60°	160.3	3.9
60°-70°	44.1	1.1
70°-80°	25.8	0.6
80°-90°	8.9	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°	2083.4	50.0
0°-40°	3230.6	77.6
0°-60°	4085.9	98.1
0°-90°	4164.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4164.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2590	2590	2590	2590	2590	
5°	2561	2620	2596	2606	2646	245
15°	2586	2664	2621	2601	2639	728
25°	2393	2464	2399	2337	2370	1096
35°	1888	1916	1872	1830	1833	1160
45°	850	967	967	933	811	653
55°	125	142	195	134	127	130
65°	41	43	43	39	37	41
75°	25	25	25	23	22	27
85°	10	10	8	8	6	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2590.0	2590.0	2590.0	2590.0	2590.0
2.5°	2565.0	2610.8	2585.3	2587.3	2608.7
5°	2560.7	2619.8	2595.8	2606.5	2646.5
7.5°	2567.7	2629.5	2615.3	2619.1	2662.9
10°	2572.4	2637.3	2623.1	2622.2	2666.0
12.5°	2583.3	2651.2	2624.7	2619.0	2661.4
15°	2586.1	2664.3	2621.2	2600.6	2638.7
17.5°	2560.7	2646.9	2588.8	2546.2	2576.7
20°	2529.5	2617.2	2552.9	2493.2	2523.7
22.5°	2481.1	2567.3	2498.3	2433.9	2465.9
25°	2393.0	2463.6	2398.8	2337.2	2369.6
27.5°	2281.4	2331.0	2275.6	2217.1	2235.4
30°	2186.3	2235.8	2180.4	2120.1	2127.8
32.5°	2080.2	2122.1	2068.1	2014.0	2020.1
35°	1887.9	1916.5	1872.3	1829.5	1833.3
37.5°	1653.8	1657.7	1627.7	1588.7	1589.5
40°	1466.6	1478.1	1445.2	1414.0	1417.9
42.5°	1243.5	1288.5	1256.4	1228.3	1229.1
45°	850.3	966.6	967.3	933.4	811.3
47.5°	469.6	604.3	690.8	535.7	404.5
50°	296.4	382.3	520.7	313.1	275.0
52.5°	212.2	250.7	380.3	221.5	201.7
55°	124.8	142.0	195.0	134.4	126.8
57.5°	76.1	90.9	113.9	89.8	76.5
60°	52.7	66.0	85.8	60.2	46.8
62.5°	46.4	50.6	67.1	47.9	43.7
65°	41.0	42.9	42.9	39.0	37.1
67.5°	36.3	38.2	36.3	34.3	32.4
70°	33.2	35.1	33.2	31.2	29.3
72.5°	30.0	31.9	30.0	28.0	26.1
75°	25.4	25.4	25.4	23.4	21.5
77.5°	20.7	20.7	20.3	18.7	16.8
80°	17.6	17.6	15.6	15.6	13.7
82.5°	14.4	14.4	12.5	12.4	10.5
85°	9.8	9.8	7.8	7.8	5.9
87.5°	4.7	4.7	3.1	3.1	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)