

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: P645213

Luminaire Tested: OMN4DP-SR4F0-100D935-BBM-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P645213
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-SR4F0-100D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

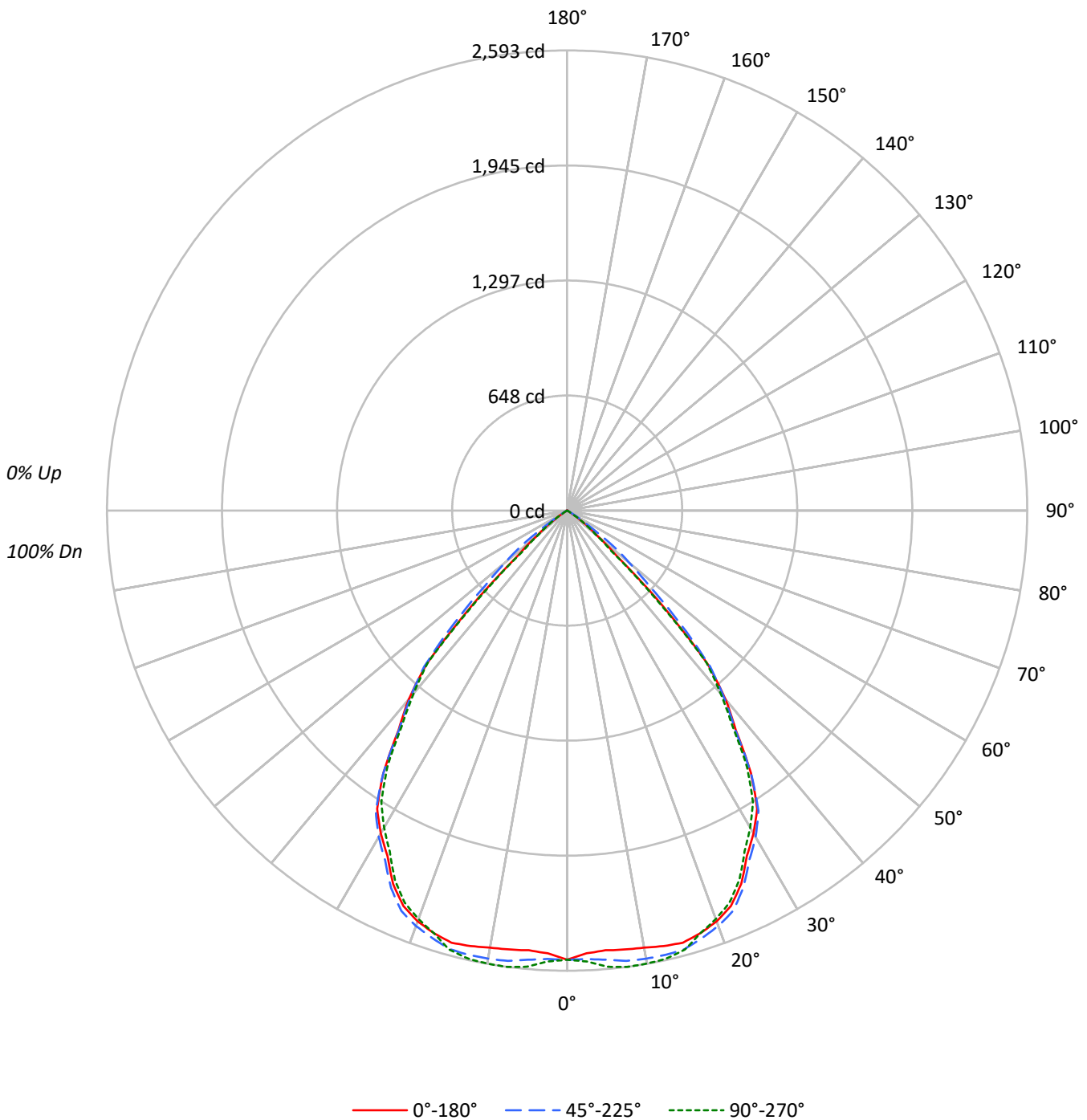
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3887.0 lumens
Efficiency: N/A
Efficacy: 102.0 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	32686	32686	32686
5°	32248	32939	33451
10°	32802	33631	33994
15°	33706	34209	34261
20°	33861	34241	33670
25°	33080	33447	32714
30°	31320	31673	30759
35°	28470	28470	27879
40°	23416	23183	22684
45°	14002	16455	13351
50°	4525	9169	4248
55°	1601	3069	1601
60°	103	868	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: 16455 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.4	6.3
10°-20°	720.4	18.5
20°-30°	1066.0	27.4
30°-40°	1101.9	28.3
40°-50°	641.1	16.5
50°-60°	108.6	2.8
60°-70°	4.3	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°	2029.9	52.2
0°-40°	3131.8	80.6
0°-60°	3881.5	99.9
0°-90°	3887.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3887.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2530	2530	2530	2530	2530	
5°	2487	2553	2540	2547	2580	238
15°	2521	2610	2558	2545	2562	709
25°	2321	2398	2347	2276	2295	1060
35°	1806	1834	1806	1760	1768	1106
45°	766	892	901	870	731	593
55°	71	83	136	77	71	78
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°	2530.5	2530.5	2530.5	2530.5	2530.5
2.5°	2497.3	2546.8	2528.9	2530.8	2543.2
5°	2487.1	2552.7	2540.4	2547.1	2579.9
7.5°	2494.6	2561.0	2559.4	2561.3	2593.3
10°	2500.9	2570.4	2564.1	2562.8	2591.8
12.5°	2513.5	2589.2	2564.1	2561.1	2585.4
15°	2520.6	2609.5	2558.2	2544.7	2562.1
17.5°	2496.5	2595.4	2525.8	2490.0	2496.9
20°	2463.4	2563.8	2491.0	2437.9	2449.5
22.5°	2411.2	2507.0	2442.0	2376.4	2391.1
25°	2321.1	2398.4	2346.8	2276.1	2295.4
27.5°	2193.1	2254.1	2221.6	2153.1	2165.1
30°	2099.9	2150.1	2123.6	2056.5	2062.3
32.5°	1992.4	2034.9	2006.6	1948.9	1948.6
35°	1805.5	1834.5	1805.5	1760.3	1768.0
37.5°	1561.0	1583.0	1553.5	1526.3	1530.2
40°	1388.7	1406.1	1374.9	1349.1	1345.3
42.5°	1173.8	1222.1	1191.6	1156.5	1161.9
45°	766.5	892.0	900.8	870.0	730.9
47.5°	386.4	523.5	627.0	475.8	341.0
50°	225.2	308.3	456.3	251.9	211.4
52.5°	147.8	182.9	318.8	159.2	140.3
55°	71.1	82.7	136.3	76.9	71.1
57.5°	24.5	37.6	60.4	38.5	27.3
60°	4.0	15.5	33.6	11.6	2.0
62.5°	2.4	4.7	20.9	2.3	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	1.9	0.0	0.0	0.0
77.5°	0.0	1.9	0.0	0.0	0.0
80°	0.0	1.9	0.0	0.0	0.0
82.5°	0.0	1.9	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)