

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: P644531

Luminaire Tested: OMN4DIP-SR4F0-100D125U935-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644531
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-23)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-100D125U935-BBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - BLACK BAFFLE WITH MEDIUM OPTIC - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

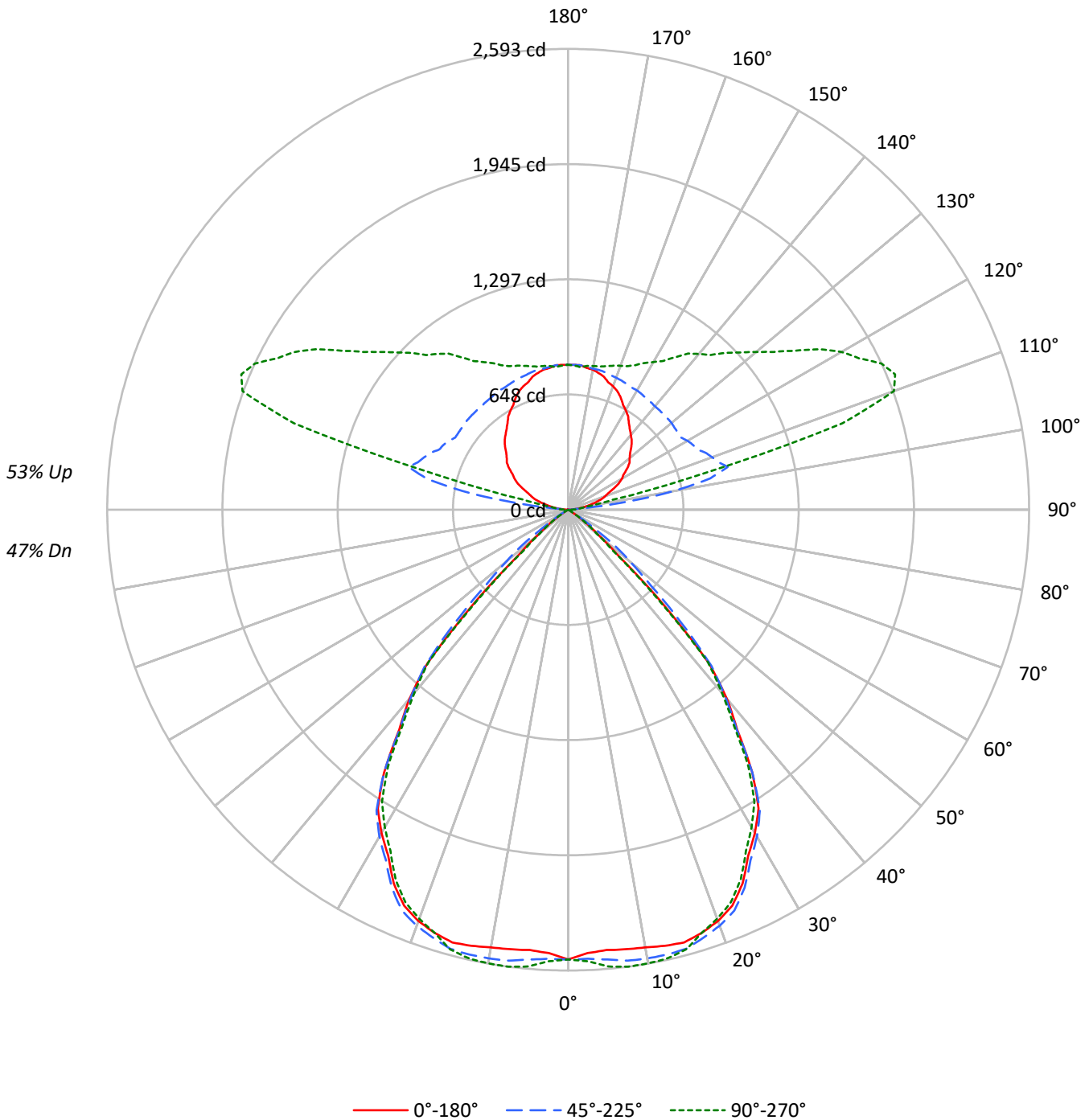
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8270.4 lumens
Efficiency: N/A
Efficacy: 108.4 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: General Diffuse

Input Watts (W): 76.3
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

TEST NUMBER: P644531
CATALOG NUMBER: OMN4DIP-SR4F0-100D125U935-BBMOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644531

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U935-BBMOOB-1DUDD-WW

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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47				
1	99	95	92	89	91	88	85	83	74	72	71	62	60	59	50	49	49	43				
2	92	86	80	76	84	79	75	71	67	64	62	57	54	53	46	45	44	39				
3	85	77	71	66	78	72	66	62	61	57	54	52	49	47	43	41	40	36				
4	79	70	63	58	73	65	59	54	56	52	48	48	44	42	40	38	36	33				
5	73	63	56	51	68	59	53	48	51	46	43	44	40	38	37	35	33	30				
6	68	57	50	45	63	54	47	43	47	42	38	40	37	34	34	32	30	27				
7	63	52	45	40	59	49	43	38	43	38	35	37	34	31	32	29	27	25				
8	59	48	41	36	55	45	39	35	40	35	31	34	31	28	30	27	25	23				
9	55	44	37	33	51	42	36	31	37	32	29	32	28	26	28	25	23	21				
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21	19				

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



TEST NUMBER: P644531

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U935-BBMOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.4	2.9
10°-20°	720.4	8.7
20°-30°	1066.0	12.9
30°-40°	1101.9	13.3
40°-50°	641.1	7.8
50°-60°	108.6	1.3
60°-70°	4.3	0.1
70°-80°	0.6	0.0
80°-90°	2.4	0.0
90°-100°	100.3	1.2
100°-110°	714.6	8.6
110°-120°	970.2	11.7
120°-130°	789.6	9.5
130°-140°	635.1	7.7
140°-150°	500.7	6.1
150°-160°	366.1	4.4
160°-170°	227.4	2.7
170°-180°	77.5	0.9
0°-30°	2029.9	24.5
0°-40°	3131.8	37.9
0°-60°	3881.5	46.9
0°-90°	3888.8	47.0
90°-120°	1785.1	21.6
90°-150°	3710.5	44.9
90°-180°	4382.0	53.0
0°-180°	8270.4	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	5	10	15	15	2
95°	41	76	41	46	56	46
105°	159	244	928	1186	785	168
115°	282	342	800	1663	1944	280
125°	405	460	754	1319	1560	360
135°	503	558	759	1086	1247	387
145°	595	645	764	946	1046	374
155°	698	723	780	858	898	320
165°	775	785	800	821	836	218
175°	816	821	816	810	805	77
180°	816	816	816	816	816	



TEST NUMBER: P644531

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U935-BBMOOB-1DUDD-WW

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	2.6	2.1	3.1	3.1
90°	0.0	5.0	10.3	15.4	15.4
92.5°	12.3	17.3	22.6	31.9	35.9
95°	41.0	76.2	41.0	46.4	56.4
97.5°	72.8	146.1	301.6	89.0	77.0
100°	97.5	182.7	605.3	178.2	118.0
102.5°	122.1	211.4	818.7	470.2	257.5
105°	159.0	244.3	928.5	1186.2	784.9
107.5°	196.0	260.2	886.5	1726.3	1617.0
110°	220.6	280.8	861.8	1814.0	1949.4



TEST NUMBER: P644531

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U935-BBMOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	245.2	305.4	837.2	1762.7	1990.4
115°	282.2	342.3	800.3	1663.4	1944.3
117.5°	320.1	379.3	791.0	1555.8	1844.8
120°	348.8	404.0	774.6	1474.0	1775.0
122.5°	369.4	428.5	754.1	1403.7	1680.6
125°	405.3	460.4	754.1	1318.8	1559.5
127.5°	435.0	491.2	755.1	1220.2	1457.9
130°	451.4	511.6	759.2	1154.3	1380.0
132.5°	472.0	532.2	759.2	1124.6	1310.2
135°	502.7	557.9	759.2	1086.1	1246.6
137.5°	528.4	587.6	759.2	1043.5	1180.9
140°	548.9	604.1	759.2	1018.6	1144.0
142.5°	569.4	620.6	763.3	989.7	1107.1
145°	595.1	645.2	764.4	946.2	1046.5
147.5°	625.9	670.0	770.5	914.9	992.1
150°	646.4	686.5	774.6	894.1	959.3
152.5°	666.9	703.0	774.6	877.4	930.6
155°	697.7	722.8	779.8	857.6	897.8
157.5°	722.3	746.4	785.9	845.1	874.2
160°	738.7	758.8	790.0	836.8	861.8
162.5°	751.0	771.1	794.1	832.5	849.5
165°	774.6	784.7	800.3	821.1	836.2
167.5°	788.0	797.0	805.4	815.9	824.9
170°	800.3	805.3	805.4	815.8	820.8
172.5°	804.4	813.4	809.5	811.7	816.7
175°	815.7	820.7	815.7	810.4	805.4
177.5°	815.7	819.7	815.7	815.6	811.6
180°	815.7	815.7	815.7	815.7	815.7

(END OF REPORT)