

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: P644542

Luminaire Tested: OMN4DIP-SR4F0-100D125U940-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644542
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-27)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-100D125U940-WBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - WHITE BAFFLE WITH MEDIUM OPTIC - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

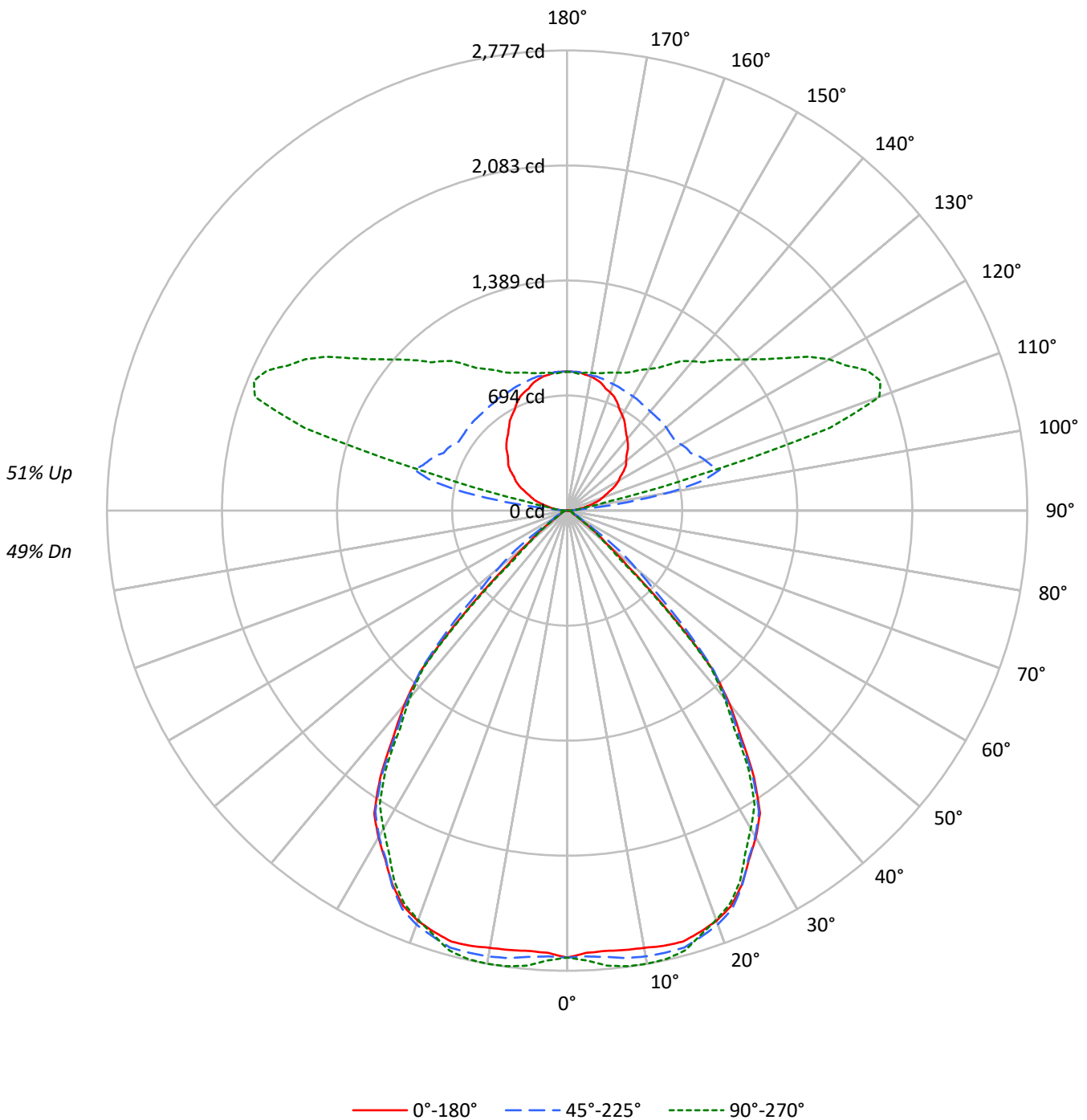
Lumens per Lamp: N/A
Luminaire Lumens: 8844.7 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: General Diffuse

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									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	107	107	107	107	99	99	99	99	83	83	83	68	68	68	55	55	55	49																			
1	99	96	92	89	92	89	86	83	75	73	72	63	62	60	51	51	50	45																			
2	92	86	81	76	85	80	75	71	68	65	62	57	55	53	48	46	45	41																			
3	85	77	71	66	79	72	66	62	62	58	55	53	50	47	44	42	41	37																			
4	79	70	63	57	73	65	59	54	56	52	48	48	45	42	41	38	37	33																			
5	73	63	56	51	68	59	53	48	51	47	43	44	41	38	38	35	33	30																			
6	68	57	50	45	63	54	47	43	47	42	38	41	37	34	35	32	30	27																			
7	63	52	45	40	59	49	43	38	43	38	35	38	34	31	32	30	28	25																			
8	59	48	41	36	55	45	39	34	40	35	31	35	31	28	30	27	25	23																			
9	55	44	37	33	51	42	35	31	37	32	29	32	29	26	28	25	23	21																			
10	52	41	34	30	48	38	32	28	34	29	26	30	26	24	26	23	21	20																			

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	2.9
10°-20°	768.5	8.7
20°-30°	1141.6	12.9
30°-40°	1194.8	13.5
40°-50°	723.7	8.2
50°-60°	167.0	1.9
60°-70°	45.9	0.5
70°-80°	26.9	0.3
80°-90°	11.2	0.1
90°-100°	103.1	1.2
100°-110°	734.8	8.3
110°-120°	997.6	11.3
120°-130°	811.9	9.2
130°-140°	653.0	7.4
140°-150°	514.8	5.8
150°-160°	376.4	4.3
160°-170°	233.8	2.6
170°-180°	79.7	0.9
0°-30°	2169.9	24.5
0°-40°	3364.7	38.0
0°-60°	4255.4	48.1
0°-90°	4339.4	49.1
90°-120°	1835.5	20.8
90°-150°	3815.3	43.1
90°-180°	4505.0	50.9
0°-180°	8844.7	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	10
90°	0	5	10	16	16	2
95°	42	78	42	48	58	47
105°	164	251	955	1220	807	172
115°	290	352	823	1710	1999	288
125°	417	473	775	1356	1604	370
135°	517	574	781	1117	1282	398
145°	612	664	786	973	1076	384
155°	717	743	802	882	923	329
165°	796	807	823	844	860	224
175°	839	844	839	833	828	79
180°	839	839	839	839	839	

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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	5.9	5.4	6.4	4.8
90°	0.0	5.2	10.5	15.8	15.8
92.5°	12.7	17.8	23.2	32.8	36.9
95°	42.2	78.3	42.2	47.7	58.0
97.5°	74.9	150.2	310.2	91.5	79.1
100°	100.2	187.9	622.4	183.2	121.3
102.5°	125.5	217.3	841.9	483.5	264.8
105°	163.5	251.2	954.8	1219.7	807.1
107.5°	201.5	267.5	911.5	1775.1	1662.6
110°	226.8	288.7	886.2	1865.2	2004.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	252.1	314.0	860.9	1812.5	2046.7
115°	290.1	352.0	822.9	1710.4	1999.2
117.5°	329.2	390.0	813.4	1599.8	1896.8
120°	358.7	415.4	796.5	1515.6	1825.1
122.5°	379.8	440.7	775.4	1443.3	1728.1
125°	416.7	473.4	775.4	1356.0	1603.6
127.5°	447.3	505.1	776.5	1254.6	1499.1
130°	464.2	526.1	780.7	1186.8	1418.9
132.5°	485.3	547.2	780.7	1156.4	1347.2
135°	516.9	573.7	780.7	1116.8	1281.8
137.5°	543.3	604.2	780.7	1073.0	1214.3
140°	564.4	621.1	780.7	1047.4	1176.3
142.5°	585.5	638.1	784.9	1017.6	1138.3
145°	611.9	663.5	786.0	972.9	1076.1
147.5°	643.5	688.9	792.3	940.7	1020.2
150°	664.6	705.9	796.5	919.4	986.4
152.5°	685.7	722.9	796.5	902.2	956.9
155°	717.4	743.2	801.8	881.8	923.1
157.5°	742.7	767.5	808.1	868.9	898.8
160°	759.6	780.2	812.3	860.4	886.2
162.5°	772.2	792.9	816.6	856.0	873.5
165°	796.5	806.8	822.9	844.3	859.8
167.5°	810.2	819.5	828.2	838.9	848.2
170°	822.9	828.0	828.2	838.8	844.0
172.5°	827.1	836.4	832.4	834.6	839.8
175°	838.7	843.9	838.7	833.3	828.2
177.5°	838.7	842.8	838.7	838.6	834.5
180°	838.7	838.7	838.7	838.7	838.7

(END OF REPORT)