

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: P644566

Luminaire Tested: OMN4DIP-SR4F0-100D150U935-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644566
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-SR4F0-100D150U935-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 - 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

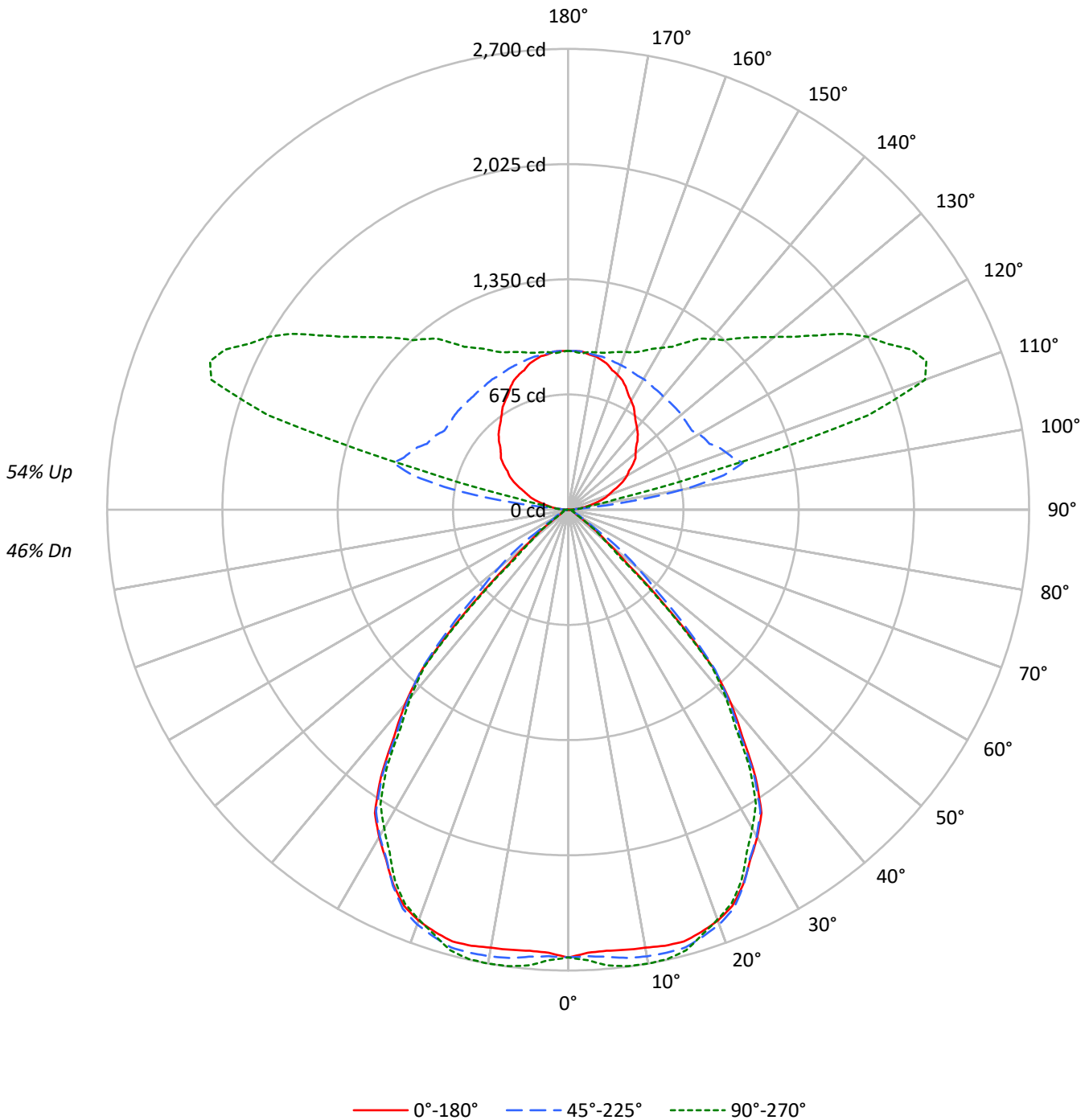
Lumens per Lamp: N/A
Luminaire Lumens: 9219.4 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 86.7
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46				
1	98	95	92	89	90	87	85	82	73	71	70	60	59	58	49	48	47	42				
2	91	85	80	75	84	78	74	70	66	63	61	55	53	51	45	44	42	38				
3	84	76	70	65	77	71	65	61	60	56	53	50	48	46	41	40	38	34				
4	78	69	62	56	72	64	58	53	55	50	47	46	43	41	38	36	35	31				
5	72	62	55	50	67	58	52	47	50	45	42	42	39	36	35	33	31	28				
6	67	56	49	44	62	53	46	42	46	41	37	39	35	33	33	30	28	26				
7	62	51	44	39	58	48	42	37	42	37	33	36	32	30	30	28	26	23				
8	58	47	40	35	54	44	38	34	38	34	30	33	30	27	28	26	24	21				
9	54	43	36	32	50	41	35	30	36	31	27	31	27	25	26	24	22	20				
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	25	22	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33886	33886	33886
5°	33630	34092	34757
10°	34175	34848	35418
15°	35028	35504	35740
20°	35218	35544	35137
25°	34544	34630	34206
30°	33028	32940	32145
35°	30152	29903	29280
40°	25048	24682	24215
45°	15733	17898	15012
50°	6034	10598	5596
55°	2846	4448	2892
60°	1377	2245	1225
65°	1268	1330	1146
70°	1269	1269	1118
75°	1283	1283	1083
80°	1324	1175	1027
85°	1467	1171	874

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 17898 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.7	2.7
10°-20°	747.4	8.1
20°-30°	1110.2	12.0
30°-40°	1162.0	12.6
40°-50°	703.8	7.6
50°-60°	162.4	1.8
60°-70°	44.6	0.5
70°-80°	26.1	0.3
80°-90°	11.1	0.1
90°-100°	114.4	1.2
100°-110°	815.3	8.8
110°-120°	1106.9	12.0
120°-130°	900.9	9.8
130°-140°	724.6	7.9
140°-150°	571.2	6.2
150°-160°	417.7	4.5
160°-170°	259.4	2.8
170°-180°	88.5	1.0
0°-30°	2110.3	22.9
0°-40°	3272.3	35.5
0°-60°	4138.5	44.9
0°-90°	4220.4	45.8
90°-120°	2036.7	22.1
90°-150°	4233.4	45.9
90°-180°	4999.0	54.2
0°-180°	9219.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2623	2623	2623	2623	2623	
5°	2594	2654	2629	2640	2681	248
15°	2619	2699	2655	2634	2673	737
25°	2424	2495	2430	2367	2400	1110
35°	1912	1941	1896	1853	1857	1175
45°	861	979	980	945	822	661
55°	126	144	198	136	128	131
65°	42	43	44	40	38	42
75°	26	26	26	24	22	27
85°	10	10	8	8	6	10
90°	0	6	12	18	18	3
95°	47	87	47	53	64	52
105°	181	279	1059	1353	896	191
115°	322	391	913	1898	2218	320
125°	462	525	860	1505	1779	411
135°	574	636	866	1239	1422	441
145°	679	736	872	1080	1194	426
155°	796	825	890	978	1024	365
165°	884	895	913	937	954	248
175°	931	936	931	925	919	88
180°	931	931	931	931	931	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2623.4	2623.4	2623.4	2623.4	2623.4
2.5°	2598.1	2644.4	2618.6	2620.7	2642.3
5°	2593.7	2653.6	2629.3	2640.1	2680.6
7.5°	2600.8	2663.4	2649.0	2652.8	2697.2
10°	2605.6	2671.2	2656.9	2656.0	2700.4
12.5°	2616.6	2685.4	2658.5	2652.8	2695.7
15°	2619.4	2698.6	2655.0	2634.1	2672.7
17.5°	2593.7	2681.0	2622.2	2579.0	2609.9
20°	2562.1	2651.0	2585.8	2525.3	2556.2
22.5°	2513.1	2600.4	2530.5	2465.3	2497.7
25°	2423.8	2495.3	2429.8	2367.3	2400.1
27.5°	2310.8	2361.1	2304.9	2245.7	2264.2
30°	2214.4	2264.7	2208.5	2147.5	2155.2
32.5°	2107.0	2149.5	2094.7	2040.0	2046.1
35°	1912.2	1941.2	1896.4	1853.0	1856.9
37.5°	1675.2	1679.0	1648.7	1609.2	1610.0
40°	1485.5	1497.1	1463.8	1432.3	1436.1
42.5°	1259.5	1305.1	1272.6	1244.1	1244.9
45°	861.3	979.1	979.8	945.4	821.8
47.5°	475.7	612.0	699.7	542.6	409.7
50°	300.3	387.2	527.4	317.2	278.5
52.5°	214.9	253.9	385.2	224.3	204.3
55°	126.4	143.8	197.5	136.1	128.4
57.5°	77.0	92.1	115.4	91.0	77.4
60°	53.3	66.9	86.9	60.9	47.4
62.5°	47.0	51.3	68.0	48.5	44.2
65°	41.5	43.4	43.5	39.5	37.5
67.5°	36.7	38.7	36.7	34.7	32.8
70°	33.6	35.5	33.6	31.6	29.6
72.5°	30.4	32.4	30.4	28.4	26.5
75°	25.7	25.7	25.7	23.7	21.7
77.5°	20.9	20.9	20.5	18.9	17.0
80°	17.8	17.8	15.8	15.8	13.8
82.5°	14.6	14.6	12.6	12.6	10.7
85°	9.9	9.9	7.9	7.9	5.9
87.5°	4.7	5.9	5.5	6.6	5.1
90°	0.0	5.7	11.7	17.6	17.6
92.5°	14.0	19.8	25.8	36.4	41.0
95°	46.8	86.9	46.8	52.9	64.4
97.5°	83.1	166.7	344.2	101.5	87.8
100°	111.2	208.5	690.6	203.3	134.6
102.5°	139.3	241.2	934.1	536.5	293.8
105°	181.4	278.7	1059.4	1353.3	895.5
107.5°	223.6	296.8	1011.4	1969.6	1844.8
110°	251.7	320.4	983.3	2069.6	2224.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	279.8	348.4	955.2	2011.1	2270.9
115°	321.9	390.6	913.1	1897.8	2218.3
117.5°	365.2	432.8	902.5	1775.1	2104.7
120°	398.0	461.0	883.8	1681.7	2025.1
122.5°	421.4	488.9	860.4	1601.5	1917.4
125°	462.4	525.3	860.4	1504.6	1779.3
127.5°	496.3	560.4	861.6	1392.1	1663.4
130°	515.1	583.7	866.2	1316.9	1574.4
132.5°	538.5	607.1	866.2	1283.1	1494.8
135°	573.6	636.5	866.2	1239.1	1422.3
137.5°	602.9	670.4	866.2	1190.5	1347.3
140°	626.3	689.2	866.2	1162.1	1305.2
142.5°	649.7	708.0	870.9	1129.1	1263.1
145°	678.9	736.2	872.1	1079.5	1194.0
147.5°	714.1	764.4	879.1	1043.8	1132.0
150°	737.5	783.3	883.8	1020.1	1094.5
152.5°	760.9	802.1	883.8	1001.1	1061.7
155°	796.0	824.6	889.6	978.5	1024.3
157.5°	824.1	851.6	896.7	964.1	997.3
160°	842.8	865.7	901.4	954.7	983.3
162.5°	856.9	879.8	906.0	949.8	969.2
165°	883.8	895.2	913.1	936.9	954.0
167.5°	899.0	909.3	918.9	930.9	941.2
170°	913.1	918.8	918.9	930.7	936.5
172.5°	917.7	928.0	923.6	926.1	931.8
175°	930.6	936.3	930.6	924.6	918.9
177.5°	930.6	935.2	930.6	930.5	925.9
180°	930.6	930.6	930.6	930.6	930.6

(END OF REPORT)