

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: P644722

Luminaire Tested: OMN4DIP-SR4F0-125D125U940-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644722
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-SR4F0-125D125U940-WBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - WHITE BAFFLE WITH MEDIUM OPTIC - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

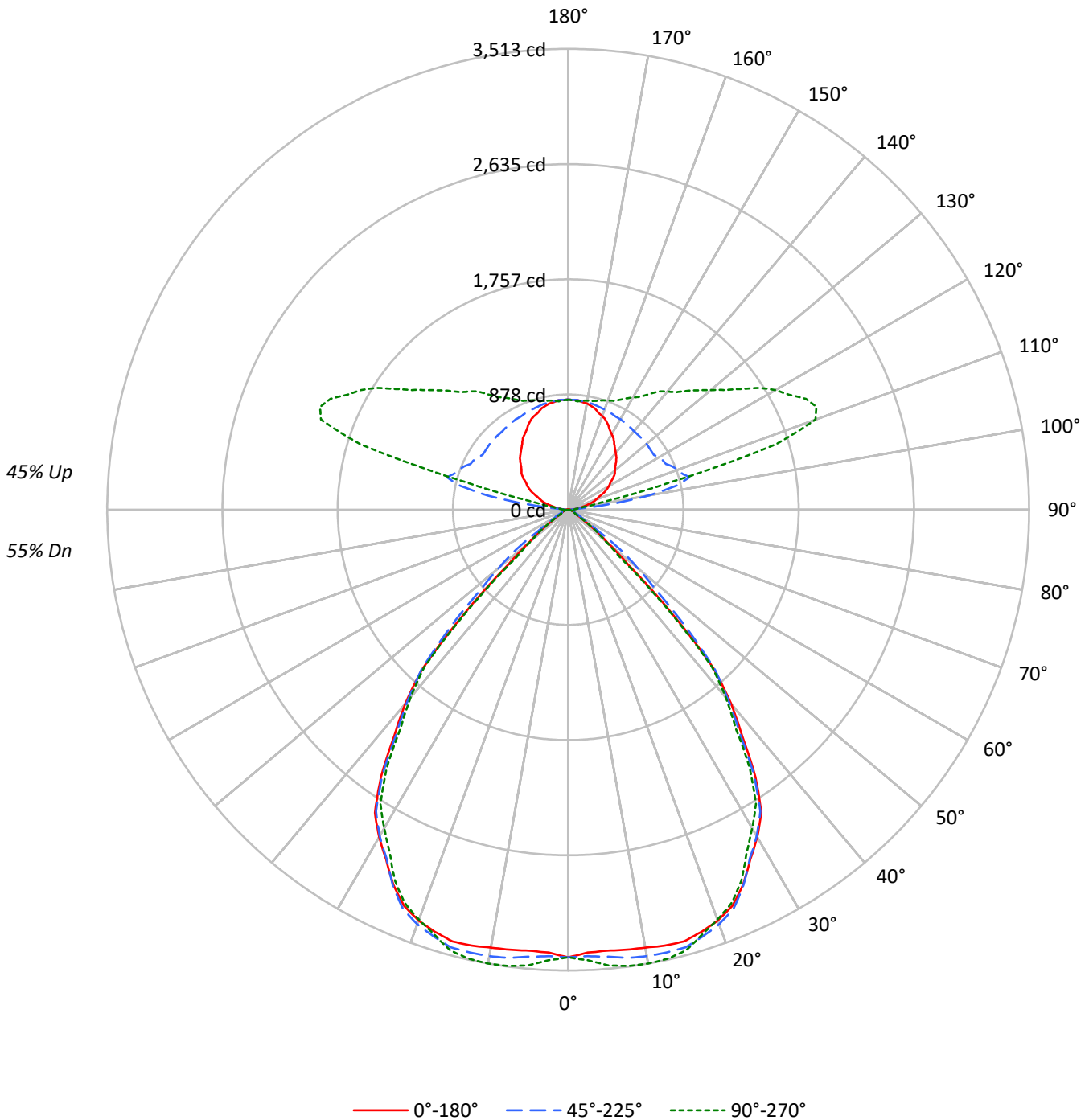
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9994.6 lumens
Efficiency: N/A
Efficacy: 114.0 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): 87.7
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									
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55																			
1	101	97	94	91	94	91	88	85	78	76	75	67	66	65	57	56	55	50																			
2	94	87	82	78	87	82	77	74	71	68	65	61	59	57	52	51	50	45																			
3	87	79	73	68	81	74	68	64	65	61	57	56	53	51	48	46	45	41																			
4	80	71	64	59	75	67	61	56	59	54	51	52	48	46	45	42	40	37																			
5	75	65	57	52	70	61	55	50	54	49	45	47	44	41	41	39	37	34																			
6	70	59	52	47	65	56	49	45	49	44	41	44	40	37	38	36	33	31																			
7	65	54	47	42	61	51	45	40	46	40	37	40	37	34	36	33	30	28																			
8	61	49	42	38	57	47	41	36	42	37	33	37	33	31	33	30	28	26																			
9	57	46	39	34	53	43	37	33	39	34	30	35	31	28	31	28	26	24																			
10	53	42	35	31	50	40	34	30	36	31	28	32	28	26	29	26	24	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	44080	44080	44080
5°	43747	44348	45214
10°	44455	45331	46074
15°	45565	46184	46493
20°	45813	46236	45707
25°	44937	45046	44498
30°	42964	42849	41814
35°	39224	38899	38089
40°	32583	32106	31501
45°	20466	23283	19527
50°	7849	13787	7280
55°	3704	5788	3761
60°	1793	2922	1594
65°	1650	1727	1492
70°	1650	1650	1454
75°	1667	1667	1412
80°	1718	1532	1339
85°	1897	1526	1141

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 23283 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.7	3.3
10°-20°	972.2	9.7
20°-30°	1444.2	14.5
30°-40°	1511.6	15.1
40°-50°	915.6	9.2
50°-60°	211.3	2.1
60°-70°	58.1	0.6
70°-80°	34.0	0.3
80°-90°	13.6	0.1
90°-100°	103.1	1.0
100°-110°	734.8	7.4
110°-120°	997.6	10.0
120°-130°	811.9	8.1
130°-140°	653.0	6.5
140°-150°	514.8	5.2
150°-160°	376.4	3.8
160°-170°	233.8	2.3
170°-180°	79.7	0.8
0°-30°	2745.1	27.5
0°-40°	4256.7	42.6
0°-60°	5383.6	53.9
0°-90°	5489.3	54.9
90°-120°	1835.5	18.4
90°-150°	3815.3	38.2
90°-180°	4505.0	45.1
0°-180°	9994.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3413	3413	3413	3413	3413	
5°	3374	3452	3420	3434	3487	323
15°	3407	3510	3454	3426	3477	959
25°	3153	3246	3161	3080	3122	1444
35°	2488	2525	2467	2410	2416	1529
45°	1120	1274	1275	1230	1069	860
55°	164	187	257	177	167	171
65°	54	56	56	51	49	54
75°	33	33	33	31	28	35
85°	13	13	10	10	8	13
90°	0	5	10	16	16	3
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°	3412.6	3412.6	3412.6	3412.6	3412.6
2.5°	3379.7	3440.0	3406.4	3409.1	3437.2
5°	3374.0	3451.9	3420.3	3434.3	3487.1
7.5°	3383.3	3464.7	3446.0	3450.9	3508.7
10°	3389.4	3474.9	3456.2	3455.0	3512.8
12.5°	3403.8	3493.3	3458.3	3450.8	3506.6
15°	3407.4	3510.4	3453.7	3426.5	3476.8
17.5°	3374.0	3487.6	3411.0	3354.9	3395.1
20°	3332.9	3448.5	3363.7	3285.0	3325.2
22.5°	3269.2	3382.7	3291.8	3206.9	3249.1
25°	3153.0	3246.0	3160.7	3079.5	3122.2
27.5°	3006.0	3071.4	2998.3	2921.3	2945.4
30°	2880.6	2946.0	2872.9	2793.5	2803.5
32.5°	2740.8	2796.1	2724.9	2653.7	2661.7
35°	2487.5	2525.2	2466.9	2410.5	2415.5
37.5°	2179.1	2184.1	2144.7	2093.3	2094.3
40°	1932.4	1947.5	1904.1	1863.1	1868.2
42.5°	1638.4	1697.7	1655.4	1618.4	1619.4
45°	1120.4	1273.7	1274.6	1229.8	1069.0
47.5°	618.8	796.2	910.2	705.8	533.0
50°	390.6	503.7	686.1	412.6	362.3
52.5°	279.6	330.3	501.1	291.8	265.7
55°	164.5	187.1	257.0	177.1	167.0
57.5°	100.2	119.8	150.1	118.3	100.7
60°	69.4	87.0	113.1	79.3	61.7
62.5°	61.2	66.7	88.4	63.1	57.6
65°	54.0	56.5	56.5	51.3	48.8
67.5°	47.8	50.3	47.8	45.2	42.7
70°	43.7	46.2	43.7	41.1	38.5
72.5°	39.6	42.1	39.6	36.9	34.4
75°	33.4	33.4	33.4	30.8	28.3
77.5°	27.2	27.2	26.7	24.6	22.1
80°	23.1	23.1	20.6	20.5	18.0
82.5°	19.0	19.0	16.4	16.4	13.9
85°	12.8	12.8	10.3	10.2	7.7
87.5°	6.2	7.2	6.2	7.2	5.2
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



TEST NUMBER: P644722

CATALOG NUMBER: OMN4DIP-SR4F0-125D125U940-WBMOOB-1DUDD-WW

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)