

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: P644717

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

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644717
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-SR4F0-125D125U940-BBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - BLACK 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

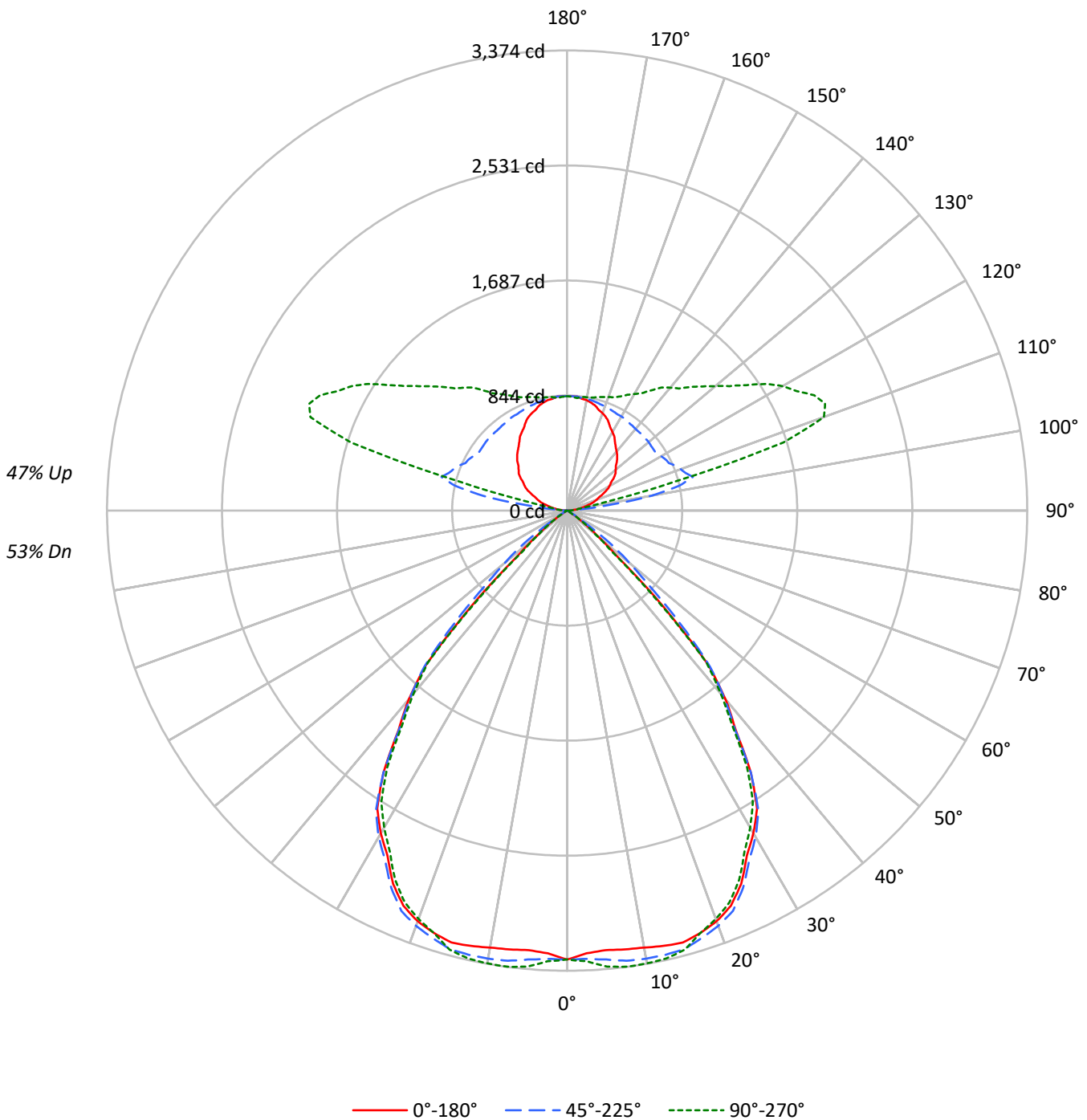
Lumens per Lamp: N/A
Luminaire Lumens: 9563.5 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: General Diffuse

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					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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53				
1	100	97	94	91	93	90	88	85	78	76	74	66	65	63	55	54	54	49				
2	93	87	82	78	87	81	77	73	71	67	65	61	58	57	51	50	49	44				
3	87	79	73	68	80	74	68	64	64	60	57	56	53	51	48	46	44	40				
4	80	71	65	59	75	67	61	57	59	54	51	51	48	45	44	42	40	37				
5	75	65	58	53	70	61	55	50	54	49	45	47	44	41	41	38	36	33				
6	70	59	52	47	65	56	49	45	49	44	41	43	40	37	38	35	33	31				
7	65	54	47	42	61	51	45	40	45	41	37	40	36	34	35	32	30	28				
8	61	50	43	38	57	47	41	36	42	37	34	37	33	31	33	30	28	26				
9	57	46	39	34	53	43	37	33	39	34	31	35	31	28	31	28	26	24				
10	53	42	36	31	50	40	34	30	36	31	28	32	28	26	29	26	24	22				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42519	42519	42519
5°	41949	42848	43514
10°	42669	43748	44219
15°	43847	44501	44569
20°	44047	44542	43799
25°	43033	43509	42557
30°	40742	41201	40014
35°	37035	37035	36266
40°	30460	30157	29508
45°	18212	21405	17368
50°	5886	11928	5526
55°	2083	3993	2083
60°	132	1129	67
65°	79	79	0
70°	98	0	0
75°	0	0	0
80°	0	0	0
85°	385	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 21405 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.7	3.3
10°-20°	937.1	9.8
20°-30°	1386.8	14.5
30°-40°	1433.4	15.0
40°-50°	834.0	8.7
50°-60°	141.3	1.5
60°-70°	5.6	0.1
70°-80°	0.8	0.0
80°-90°	2.6	0.0
90°-100°	103.1	1.1
100°-110°	734.8	7.7
110°-120°	997.6	10.4
120°-130°	811.9	8.5
130°-140°	653.0	6.8
140°-150°	514.8	5.4
150°-160°	376.4	3.9
160°-170°	233.8	2.4
170°-180°	79.7	0.8
0°-30°	2640.5	27.6
0°-40°	4073.9	42.6
0°-60°	5049.2	52.8
0°-90°	5058.2	52.9
90°-120°	1835.5	19.2
90°-150°	3815.3	39.9
90°-180°	4505.0	47.1
0°-180°	9563.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3292	3292	3292	3292	3292	
5°	3235	3321	3305	3313	3356	310
15°	3279	3394	3328	3310	3333	922
25°	3019	3120	3053	2961	2986	1379
35°	2349	2386	2349	2290	2300	1439
45°	997	1160	1172	1132	951	771
55°	92	108	177	100	92	102
65°	3	3	3	0	0	3
75°	0	2	0	0	0	1
85°	3	3	0	0	0	1
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°	3291.8	3291.8	3291.8	3291.8	3291.8
2.5°	3248.6	3312.9	3289.7	3292.2	3308.2
5°	3235.3	3320.7	3304.6	3313.3	3356.0
7.5°	3245.0	3331.5	3329.3	3331.8	3373.5
10°	3253.2	3343.7	3335.5	3333.8	3371.4
12.5°	3269.7	3368.2	3335.5	3331.6	3363.2
15°	3278.9	3394.5	3327.8	3310.3	3332.9
17.5°	3247.6	3376.2	3285.6	3239.1	3248.1
20°	3204.4	3335.1	3240.4	3171.4	3186.4
22.5°	3136.6	3261.2	3176.7	3091.3	3110.4
25°	3019.4	3119.9	3052.8	2960.9	2986.0
27.5°	2852.9	2932.3	2889.9	2800.8	2816.4
30°	2731.6	2796.9	2762.4	2675.2	2682.8
32.5°	2591.8	2647.1	2610.3	2535.3	2534.8
35°	2348.7	2386.4	2348.7	2289.8	2299.9
37.5°	2030.6	2059.2	2020.8	1985.5	1990.5
40°	1806.5	1829.1	1788.5	1755.0	1750.0
42.5°	1526.9	1589.7	1550.0	1504.5	1511.5
45°	997.0	1160.4	1171.8	1131.7	950.8
47.5°	502.6	681.0	815.6	618.9	443.5
50°	292.9	401.0	593.6	327.7	275.0
52.5°	192.2	237.9	414.7	207.1	182.4
55°	92.5	107.6	177.3	100.0	92.5
57.5°	31.9	48.9	78.6	50.0	35.5
60°	5.1	20.2	43.7	15.1	2.6
62.5°	3.1	6.1	27.2	3.0	0.5
65°	2.6	2.6	2.6	0.0	0.0
67.5°	2.6	2.6	0.0	0.0	0.0
70°	2.6	2.6	0.0	0.0	0.0
72.5°	2.6	2.6	0.0	0.0	0.0
75°	0.0	2.5	0.0	0.0	0.0
77.5°	0.0	2.5	0.0	0.0	0.0
80°	0.0	2.5	0.0	0.0	0.0
82.5°	0.0	2.5	0.0	0.0	0.0
85°	2.6	2.6	0.0	0.0	0.0
87.5°	2.1	3.1	2.1	3.2	3.2
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

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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)