

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: P644837

Luminaire Tested: OMN4DIP-SR4F0-125D75U940-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644837
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-SR4F0-125D75U940-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 - 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

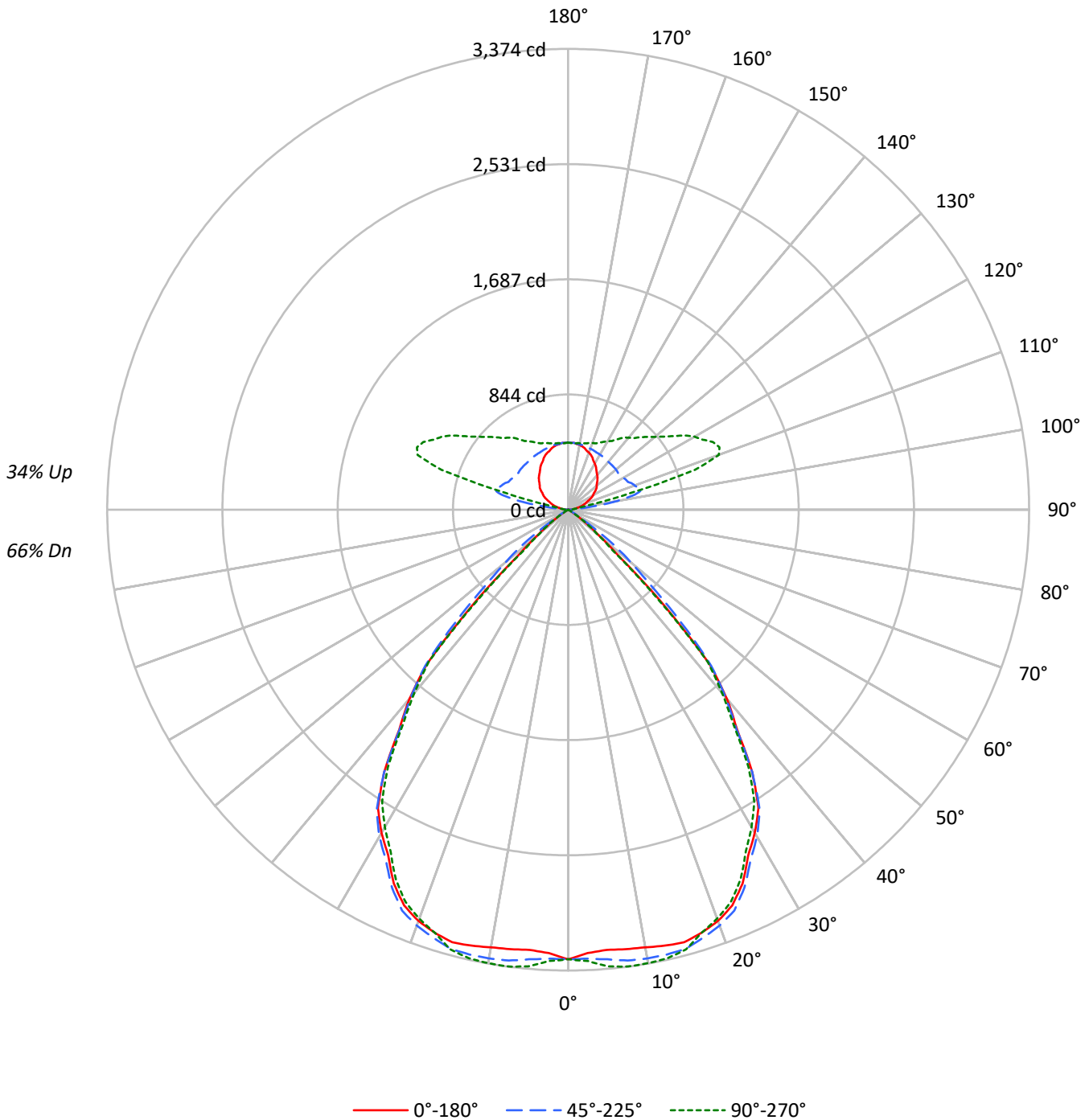
Lumens per Lamp: N/A
Luminaire Lumens: 7694.6 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 70.3
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				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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	104	100	97	95	98	95	92	90	85	83	81	75	74	73	66	65	65	61
2	97	91	86	82	91	86	82	78	77	74	72	69	67	65	62	60	59	55
3	90	83	77	72	85	78	73	69	71	67	64	64	61	58	57	55	53	50
4	84	75	68	63	79	72	66	61	65	60	57	59	55	53	53	51	48	46
5	78	69	62	56	74	65	59	55	60	55	51	54	51	48	49	46	44	42
6	73	63	56	51	69	60	54	49	55	50	46	50	46	43	46	43	40	38
7	68	58	51	46	65	55	49	44	51	46	42	47	42	39	43	39	37	35
8	64	53	46	41	61	51	45	40	47	42	38	43	39	36	40	36	34	32
9	60	49	42	38	57	47	41	37	44	39	35	40	36	33	37	34	31	29
10	57	46	39	35	54	44	38	34	41	36	32	38	33	30	35	31	29	27

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	4.1
10°-20°	937.1	12.2
20°-30°	1386.8	18.0
30°-40°	1433.4	18.6
40°-50°	834.0	10.8
50°-60°	141.3	1.8
60°-70°	5.6	0.1
70°-80°	0.8	0.0
80°-90°	1.8	0.0
90°-100°	60.4	0.8
100°-110°	430.1	5.6
110°-120°	583.9	7.6
120°-130°	475.3	6.2
130°-140°	382.3	5.0
140°-150°	301.4	3.9
150°-160°	220.3	2.9
160°-170°	136.9	1.8
170°-180°	46.7	0.6
0°-30°	2640.5	34.3
0°-40°	4073.9	52.9
0°-60°	5049.2	65.6
0°-90°	5057.4	65.7
90°-120°	1074.4	14.0
90°-150°	2233.3	29.0
90°-180°	2637.0	34.3
0°-180°	7694.6	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	3	6	9	9	1
95°	25	46	25	28	34	28
105°	96	147	559	714	472	101
115°	170	206	482	1001	1170	169
125°	244	277	454	794	939	217
135°	303	336	457	654	750	233
145°	358	388	460	570	630	225
155°	420	435	469	516	540	193
165°	466	472	482	494	503	131
175°	491	494	491	488	485	46
180°	491	491	491	491	491	



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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	2.7	1.2	1.9	1.9
90°	0.0	3.0	6.2	9.3	9.3
92.5°	7.4	10.4	13.6	19.2	21.6
95°	24.7	45.8	24.7	27.9	34.0
97.5°	43.8	87.9	181.6	53.6	46.3
100°	58.7	110.0	364.3	107.2	71.0
102.5°	73.5	127.2	492.8	283.0	155.0
105°	95.7	147.0	558.9	713.9	472.4
107.5°	117.9	156.6	533.5	1039.0	973.2
110°	132.8	169.0	518.7	1091.8	1173.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	147.6	183.8	503.9	1060.9	1198.0
115°	169.8	206.0	481.7	1001.2	1170.2
117.5°	192.7	228.3	476.1	936.4	1110.3
120°	210.0	243.2	466.2	887.2	1068.3
122.5°	222.3	257.9	453.9	844.9	1011.5
125°	243.9	277.1	453.9	793.7	938.6
127.5°	261.8	295.6	454.5	734.4	877.5
130°	271.7	307.9	457.0	694.7	830.6
132.5°	284.1	320.3	457.0	676.9	788.6
135°	302.6	335.8	457.0	653.7	750.3
137.5°	318.0	353.7	457.0	628.1	710.8
140°	330.4	363.6	457.0	613.1	688.5
142.5°	342.7	373.5	459.4	595.7	666.3
145°	358.2	388.4	460.1	569.5	629.9
147.5°	376.7	403.3	463.8	550.7	597.2
150°	389.0	413.2	466.2	538.1	577.4
152.5°	401.4	423.1	466.2	528.1	560.1
155°	419.9	435.0	469.3	516.2	540.3
157.5°	434.7	449.2	473.0	508.6	526.1
160°	444.6	456.7	475.5	503.6	518.7
162.5°	452.0	464.1	478.0	501.0	511.3
165°	466.2	472.3	481.7	494.2	503.3
167.5°	474.3	479.7	484.8	491.1	496.5
170°	481.7	484.7	484.8	491.0	494.0
172.5°	484.1	489.6	487.2	488.5	491.6
175°	490.9	494.0	490.9	487.8	484.8
177.5°	490.9	493.4	490.9	490.9	488.5
180°	490.9	490.9	490.9	490.9	490.9

(END OF REPORT)