

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: P644801

Luminaire Tested: OMN4DIP-SR4F0-125D50U935-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644801
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-SR4F0-125D50U935-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 - 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

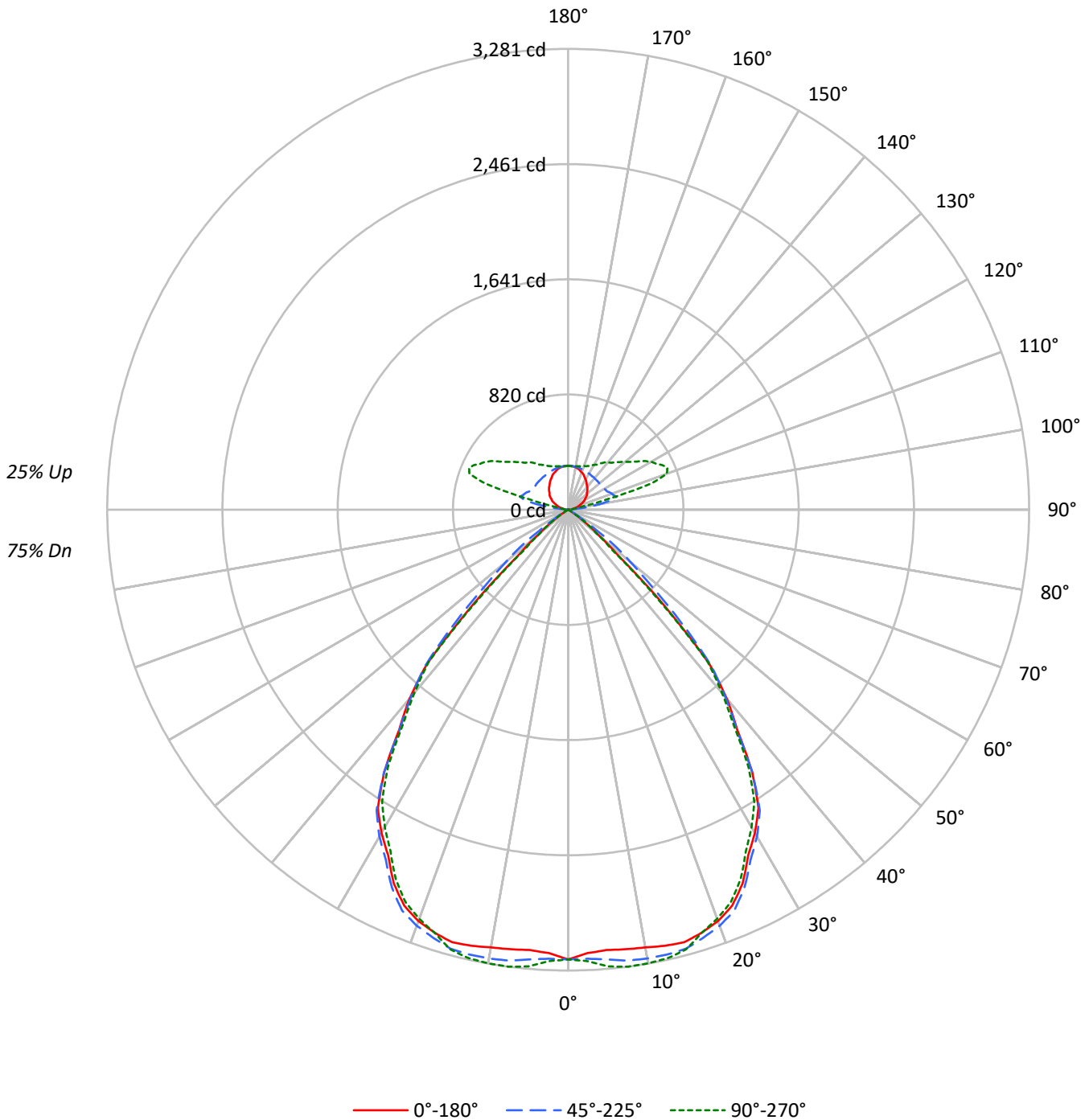
Lumens per Lamp: N/A
Luminaire Lumens: 6599.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 64.1
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	113	113	113	113	107	107	107	107	97	97	97	87	87	87	79	79	79	75				
1	106	103	100	97	101	98	96	93	89	88	86	81	80	79	74	73	72	69				
2	99	93	89	85	95	90	85	82	82	79	76	75	73	71	69	67	66	63				
3	93	85	79	75	88	82	77	72	75	71	68	70	66	64	64	62	60	57				
4	87	78	71	66	83	75	69	64	69	65	61	64	61	58	60	57	54	52				
5	81	71	64	59	77	69	62	58	64	59	55	59	55	52	55	52	49	47				
6	76	65	58	53	72	63	57	52	59	54	50	55	51	47	51	48	45	43				
7	71	60	53	48	68	58	52	47	54	49	45	51	47	43	48	44	41	39				
8	66	55	49	44	64	54	47	43	51	45	41	47	43	40	45	41	38	36				
9	62	51	45	40	60	50	44	39	47	42	38	44	40	36	42	38	35	33				
10	59	48	41	37	56	46	40	36	44	39	35	41	37	34	39	35	32	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	41352	41352	41352
5°	40796	41672	42320
10°	41498	42547	43006
15°	42643	43278	43345
20°	42837	43318	42597
25°	41851	42314	41388
30°	39623	40070	38915
35°	36018	36018	35269
40°	29624	29329	28697
45°	17714	20817	16891
50°	5725	11601	5373
55°	2027	3882	2027
60°	129	1098	65
65°	76	76	0
70°	94	0	0
75°	0	0	0
80°	0	0	0
85°	371	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 20817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.0	4.7
10°-20°	911.4	13.8
20°-30°	1348.7	20.4
30°-40°	1394.0	21.1
40°-50°	811.1	12.3
50°-60°	137.4	2.1
60°-70°	5.4	0.1
70°-80°	0.8	0.0
80°-90°	1.4	0.0
90°-100°	38.5	0.6
100°-110°	274.1	4.2
110°-120°	372.2	5.6
120°-130°	302.9	4.6
130°-140°	243.6	3.7
140°-150°	192.1	2.9
150°-160°	140.4	2.1
160°-170°	87.2	1.3
170°-180°	29.7	0.5
0°-30°	2568.0	38.9
0°-40°	3962.0	60.0
0°-60°	4910.6	74.4
0°-90°	4918.2	74.5
90°-120°	684.8	10.4
90°-150°	1423.4	21.6
90°-180°	1681.0	25.5
0°-180°	6599.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3201	3201	3201	3201	3201	
5°	3146	3230	3214	3222	3264	301
15°	3189	3301	3236	3219	3241	897
25°	2936	3034	2969	2880	2904	1341
35°	2284	2321	2284	2227	2237	1399
45°	970	1128	1140	1101	925	750
55°	90	105	172	97	90	99
65°	2	2	2	0	0	3
75°	0	2	0	0	0	1
85°	2	2	0	0	0	1
90°	0	2	4	6	6	1
95°	16	29	16	18	22	18
105°	61	94	356	455	301	64
115°	108	131	307	638	746	107
125°	156	177	289	506	598	138
135°	193	214	291	417	478	148
145°	228	248	293	363	402	143
155°	268	277	299	329	344	123
165°	297	301	307	315	321	83
175°	313	315	313	311	309	30
180°	313	313	313	313	313	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3201.4	3201.4	3201.4	3201.4	3201.4
2.5°	3159.4	3222.0	3199.4	3201.7	3217.4
5°	3146.4	3229.5	3213.9	3222.3	3263.9
7.5°	3155.9	3240.0	3237.9	3240.3	3280.9
10°	3163.9	3251.9	3243.9	3242.2	3278.9
12.5°	3179.9	3275.7	3243.9	3240.1	3270.9
15°	3188.9	3301.3	3236.4	3219.4	3241.4
17.5°	3158.4	3283.5	3195.4	3150.1	3158.9
20°	3116.4	3243.5	3151.4	3084.3	3098.9
22.5°	3050.4	3171.6	3089.4	3006.4	3024.9
25°	2936.5	3034.2	2969.0	2879.6	2904.0
27.5°	2774.5	2851.7	2810.5	2723.9	2739.0
30°	2656.6	2720.1	2686.6	2601.8	2609.1
32.5°	2520.6	2574.4	2538.6	2465.6	2465.1
35°	2284.2	2320.9	2284.2	2226.9	2236.7
37.5°	1974.8	2002.7	1965.3	1930.9	1935.8
40°	1756.9	1778.9	1739.4	1706.8	1701.9
42.5°	1485.0	1546.1	1507.5	1463.1	1470.0
45°	969.7	1128.5	1139.6	1100.6	924.7
47.5°	488.8	662.3	793.2	601.9	431.3
50°	284.9	390.0	577.3	318.7	267.4
52.5°	186.9	231.4	403.4	201.4	177.4
55°	90.0	104.6	172.4	97.3	90.0
57.5°	31.0	47.6	76.5	48.7	34.5
60°	5.0	19.7	42.5	14.7	2.5
62.5°	3.0	5.9	26.5	2.9	0.5
65°	2.5	2.5	2.5	0.0	0.0
67.5°	2.5	2.5	0.0	0.0	0.0
70°	2.5	2.5	0.0	0.0	0.0
72.5°	2.5	2.5	0.0	0.0	0.0
75°	0.0	2.4	0.0	0.0	0.0
77.5°	0.0	2.4	0.0	0.0	0.0
80°	0.0	2.4	0.0	0.0	0.0
82.5°	0.0	2.4	0.0	0.0	0.0
85°	2.5	2.5	0.0	0.0	0.0
87.5°	2.0	2.4	0.8	1.2	1.2
90°	0.0	1.9	3.9	5.9	5.9
92.5°	4.7	6.6	8.7	12.2	13.8
95°	15.7	29.2	15.7	17.8	21.6
97.5°	27.9	56.0	115.7	34.1	29.5
100°	37.4	70.1	232.2	68.4	45.3
102.5°	46.8	81.1	314.1	180.4	98.8
105°	61.0	93.7	356.2	455.0	301.1
107.5°	75.2	99.8	340.1	662.3	620.3
110°	84.6	107.7	330.6	695.9	747.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.1	117.2	321.2	676.2	763.6
115°	108.2	131.3	307.0	638.1	745.9
117.5°	122.8	145.5	303.5	596.9	707.7
120°	133.8	155.0	297.2	565.5	680.9
122.5°	141.7	164.4	289.3	538.5	644.7
125°	155.5	176.6	289.3	505.9	598.3
127.5°	166.9	188.4	289.7	468.1	559.3
130°	173.2	196.3	291.3	442.8	529.4
132.5°	181.1	204.1	291.3	431.4	502.6
135°	192.9	214.0	291.3	416.6	478.2
137.5°	202.7	225.4	291.3	400.3	453.0
140°	210.6	231.7	291.3	390.8	438.9
142.5°	218.4	238.1	292.8	379.7	424.7
145°	228.3	247.5	293.2	363.0	401.5
147.5°	240.1	257.0	295.6	351.0	380.6
150°	248.0	263.4	297.2	343.0	368.0
152.5°	255.8	269.7	297.2	336.6	357.0
155°	267.6	277.3	299.1	329.0	344.4
157.5°	277.1	286.3	301.5	324.2	335.3
160°	283.4	291.1	303.1	321.0	330.6
162.5°	288.1	295.8	304.6	319.4	325.9
165°	297.2	301.0	307.0	315.0	320.8
167.5°	302.3	305.7	309.0	313.0	316.5
170°	307.0	308.9	309.0	313.0	314.9
172.5°	308.6	312.0	310.5	311.4	313.3
175°	312.9	314.8	312.9	310.9	309.0
177.5°	312.9	314.4	312.9	312.9	311.3
180°	312.9	312.9	312.9	312.9	312.9

(END OF REPORT)