

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: P644812

Luminaire Tested: OMN4DIP-SR4F0-125D50U940-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644812
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-SR4F0-125D50U940-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 - 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

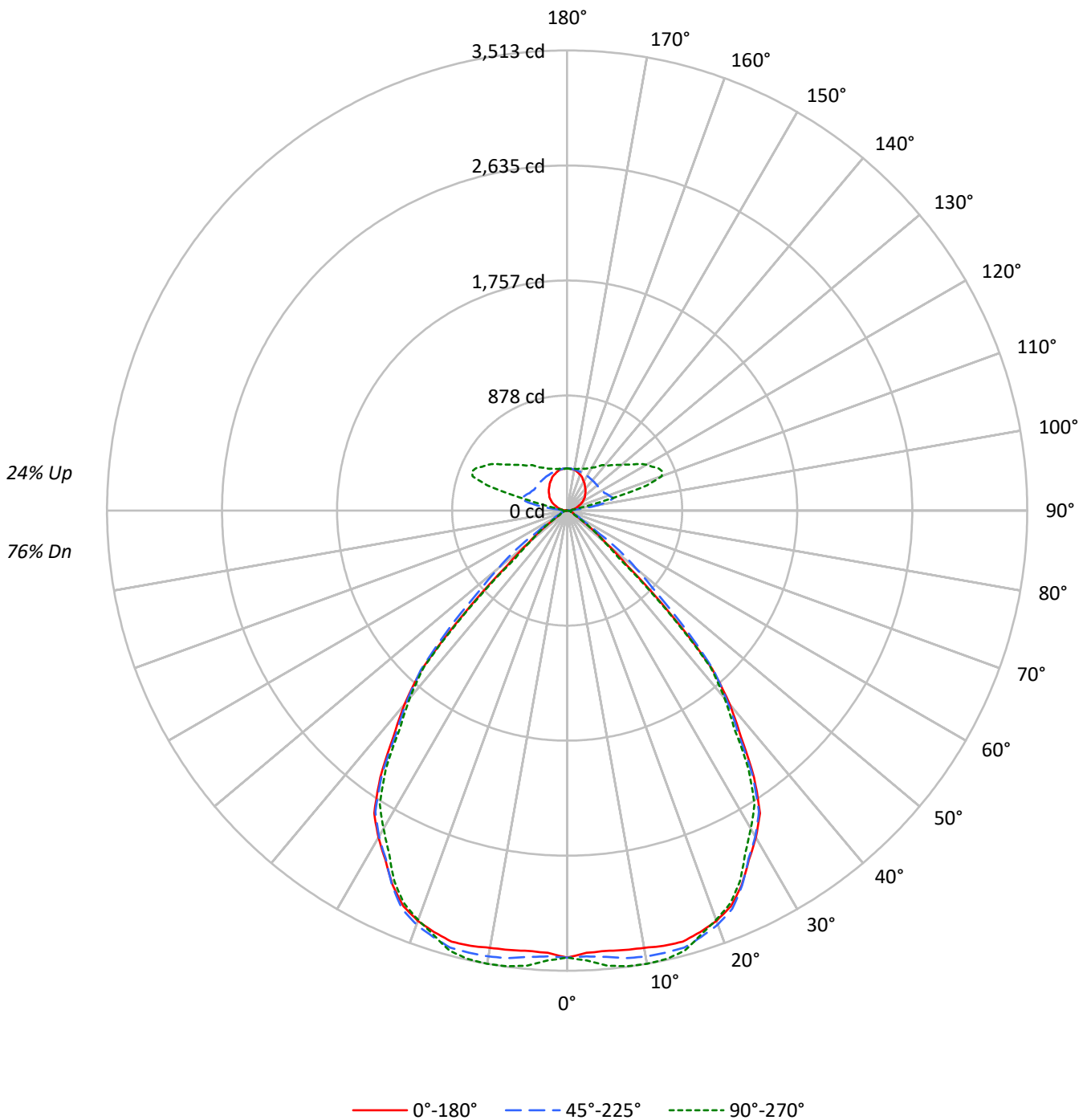
Lumens per Lamp: N/A
Luminaire Lumens: 7216.5 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 64.1
Input Voltage (V): 120
Input Current (A_{in}): 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	108	108	108	108	98	98	98	89	89	89	80	80	80	80	80	80	76	
1	106	103	100	97	101	98	96	93	90	88	86	82	81	79	75	74	73	75	74	73	69	
2	99	93	88	84	95	89	85	81	82	79	76	76	73	71	70	68	66	70	68	66	63	
3	93	85	79	74	88	81	76	72	75	71	68	70	66	64	64	62	60	64	62	60	57	
4	86	77	71	65	82	74	68	64	69	64	60	64	60	57	60	57	54	60	57	54	52	
5	81	71	64	58	77	68	62	57	63	58	54	59	55	52	55	52	49	55	52	49	47	
6	75	65	58	52	72	63	56	51	58	53	49	55	50	47	51	48	45	51	48	45	43	
7	70	59	52	47	67	58	51	46	54	49	45	51	46	43	48	44	41	48	44	41	39	
8	66	55	48	43	63	53	47	42	50	45	41	47	42	39	44	40	38	44	40	38	36	
9	62	51	44	39	59	49	43	39	47	41	37	44	39	36	41	37	35	41	37	35	33	
10	58	47	41	36	56	46	40	35	43	38	34	41	36	33	39	35	32	39	35	32	30	

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	4.6
10°-20°	972.2	13.5
20°-30°	1444.2	20.0
30°-40°	1511.6	20.9
40°-50°	915.6	12.7
50°-60°	211.3	2.9
60°-70°	58.1	0.8
70°-80°	34.0	0.5
80°-90°	12.5	0.2
90°-100°	39.6	0.5
100°-110°	281.9	3.9
110°-120°	382.7	5.3
120°-130°	311.5	4.3
130°-140°	250.5	3.5
140°-150°	197.5	2.7
150°-160°	144.4	2.0
160°-170°	89.7	1.2
170°-180°	30.6	0.4
0°-30°	2745.1	38.0
0°-40°	4256.7	59.0
0°-60°	5383.6	74.6
0°-90°	5488.1	76.0
90°-120°	704.2	9.8
90°-150°	1463.7	20.3
90°-180°	1728.0	23.9
0°-180°	7216.5	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	2	4	6	6	2
95°	16	30	16	18	22	18
105°	63	96	366	468	310	66
115°	111	135	316	656	767	110
125°	160	182	298	520	615	142
135°	198	220	300	428	492	153
145°	235	254	302	373	413	147
155°	275	285	308	338	354	126
165°	306	310	316	324	330	86
175°	322	324	322	320	318	30
180°	322	322	322	322	322	



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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	6.6	4.9	5.3	3.3
90°	0.0	2.0	4.0	6.1	6.1
92.5°	4.9	6.8	8.9	12.6	14.2
95°	16.2	30.0	16.2	18.3	22.3
97.5°	28.7	57.6	119.0	35.1	30.4
100°	38.4	72.1	238.8	70.3	46.5
102.5°	48.2	83.4	323.0	185.5	101.6
105°	62.7	96.4	366.3	467.9	309.6
107.5°	77.3	102.6	349.7	681.0	637.8
110°	87.0	110.8	340.0	715.5	769.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	96.7	120.5	330.2	695.3	785.1
115°	111.3	135.0	315.7	656.1	766.9
117.5°	126.3	149.6	312.0	613.7	727.7
120°	137.6	159.4	305.6	581.4	700.2
122.5°	145.7	169.0	297.5	553.7	662.9
125°	159.9	181.6	297.5	520.2	615.2
127.5°	171.6	193.8	297.9	481.3	575.1
130°	178.1	201.8	299.5	455.3	544.3
132.5°	186.2	209.9	299.5	443.6	516.8
135°	198.3	220.1	299.5	428.4	491.7
137.5°	208.4	231.8	299.5	411.6	465.8
140°	216.5	238.3	299.5	401.8	451.3
142.5°	224.6	244.8	301.1	390.4	436.7
145°	234.7	254.5	301.5	373.2	412.8
147.5°	246.9	264.3	303.9	360.9	391.4
150°	255.0	270.8	305.6	352.7	378.4
152.5°	263.1	277.3	305.6	346.1	367.1
155°	275.2	285.1	307.6	338.3	354.1
157.5°	284.9	294.4	310.0	333.3	344.8
160°	291.4	299.3	311.6	330.1	340.0
162.5°	296.2	304.2	313.2	328.4	335.1
165°	305.6	309.5	315.7	323.9	329.8
167.5°	310.8	314.4	317.7	321.8	325.4
170°	315.7	317.7	317.7	321.8	323.8
172.5°	317.3	320.9	319.3	320.2	322.2
175°	321.7	323.7	321.7	319.7	317.7
177.5°	321.7	323.3	321.7	321.7	320.1
180°	321.7	321.7	321.7	321.7	321.7

(END OF REPORT)