

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: P644752

Luminaire Tested: OMN4DIP-SR4F0-125D150U940-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644752
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-SR4F0-125D150U940-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 - 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

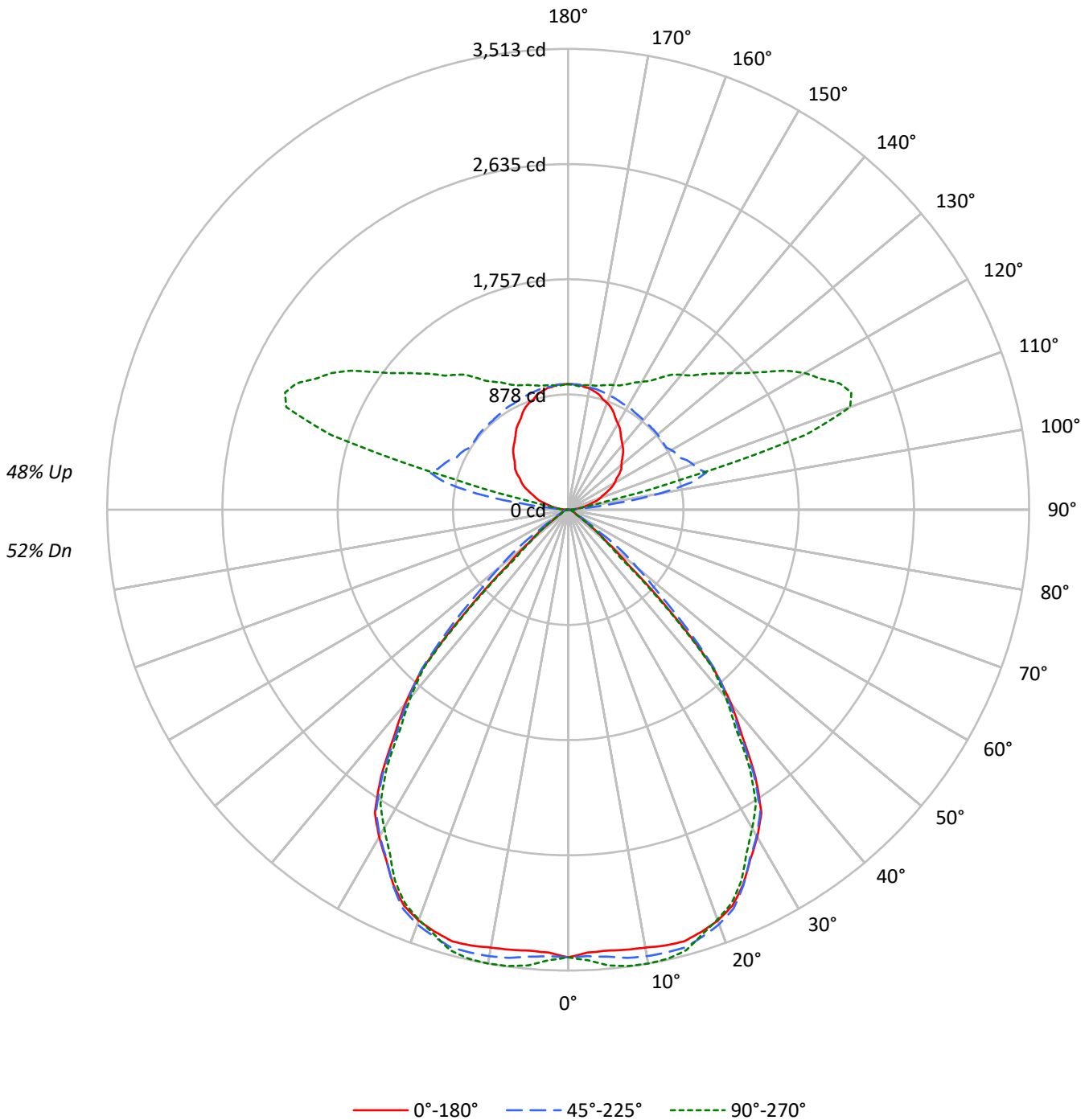
Lumens per Lamp: N/A
Luminaire Lumens: 10629.7 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 98.1
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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52				
1	100	96	93	90	92	89	87	84	77	75	73	65	63	62	54	53	52	47				
2	93	86	81	77	86	81	76	72	69	66	64	59	57	55	50	48	47	43				
3	86	78	72	67	80	73	67	63	63	59	56	54	51	49	46	44	42	39				
4	80	70	63	58	74	66	60	55	57	53	49	50	46	44	42	40	38	35				
5	74	64	57	51	69	60	54	49	52	48	44	46	42	39	39	37	35	32				
6	69	58	51	46	64	55	48	44	48	43	39	42	38	35	36	34	32	29				
7	64	53	46	41	60	50	44	39	44	39	36	39	35	32	34	31	29	26				
8	60	49	42	37	56	46	40	35	41	36	32	36	32	29	31	29	26	24				
9	56	45	38	33	52	42	36	32	38	33	29	33	30	27	29	26	24	22				
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	21				

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	3.1
10°-20°	972.2	9.1
20°-30°	1444.2	13.6
30°-40°	1511.6	14.2
40°-50°	915.6	8.6
50°-60°	211.3	2.0
60°-70°	58.1	0.5
70°-80°	34.0	0.3
80°-90°	13.9	0.1
90°-100°	117.7	1.1
100°-110°	838.3	7.9
110°-120°	1138.2	10.7
120°-130°	926.4	8.7
130°-140°	745.1	7.0
140°-150°	587.4	5.5
150°-160°	429.5	4.0
160°-170°	266.8	2.5
170°-180°	91.0	0.9
0°-30°	2745.1	25.8
0°-40°	4256.7	40.0
0°-60°	5383.6	50.6
0°-90°	5489.5	51.6
90°-120°	2094.2	19.7
90°-150°	4353.0	41.0
90°-180°	5140.0	48.4
0°-180°	10629.7	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	6	12	18	18	3
95°	48	89	48	54	66	54
105°	187	287	1089	1392	921	197
115°	331	402	939	1951	2281	329
125°	475	540	885	1547	1830	422
135°	590	654	891	1274	1462	454
145°	698	757	897	1110	1228	438
155°	818	848	915	1006	1053	376
165°	909	920	939	963	981	255
175°	957	963	957	951	945	90
180°	957	957	957	957	957	



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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	7.3	6.5	7.7	5.7
90°	0.0	5.9	12.0	18.1	18.1
92.5°	14.4	20.3	26.5	37.4	42.1
95°	48.1	89.3	48.1	54.4	66.2
97.5°	85.5	171.4	353.9	104.4	90.3
100°	114.3	214.4	710.2	209.0	138.4
102.5°	143.2	248.0	960.5	551.6	302.1
105°	186.6	286.6	1089.3	1391.5	920.8
107.5°	229.9	305.2	1039.9	2025.2	1896.9
110°	258.8	329.4	1011.1	2128.0	2286.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	287.7	358.3	982.2	2067.9	2335.1
115°	331.0	401.6	938.8	1951.4	2280.9
117.5°	375.5	445.0	928.0	1825.2	2164.2
120°	409.2	474.0	908.8	1729.2	2082.3
122.5°	433.3	502.7	884.7	1646.7	1971.6
125°	475.4	540.2	884.7	1547.1	1829.5
127.5°	510.3	576.3	885.9	1431.5	1710.4
130°	529.6	600.2	890.7	1354.1	1618.9
132.5°	553.7	624.3	890.7	1319.3	1537.1
135°	589.8	654.5	890.7	1274.1	1462.4
137.5°	619.9	689.3	890.7	1224.2	1385.4
140°	643.9	708.7	890.7	1195.0	1342.1
142.5°	668.0	728.0	895.5	1161.0	1298.7
145°	698.1	757.0	896.7	1110.0	1227.7
147.5°	734.2	786.0	903.9	1073.3	1163.9
150°	758.3	805.4	908.8	1048.9	1125.4
152.5°	782.4	824.7	908.8	1029.3	1091.7
155°	818.5	847.9	914.8	1006.1	1053.2
157.5°	847.4	875.6	922.0	991.4	1025.5
160°	866.6	890.2	926.8	981.6	1011.1
162.5°	881.1	904.6	931.6	976.6	996.6
165°	908.8	920.5	938.8	963.3	981.0
167.5°	924.4	935.0	944.9	957.1	967.7
170°	938.8	944.7	944.9	957.0	962.9
172.5°	943.7	954.2	949.7	952.2	958.1
175°	956.9	962.8	956.9	950.7	944.9
177.5°	956.9	961.6	956.9	956.8	952.1
180°	956.9	956.9	956.9	956.9	956.9

(END OF REPORT)