

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: P644741

Luminaire Tested: OMN4DIP-SR4F0-125D150U935-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644741
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-SR4F0-125D150U935-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 - 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

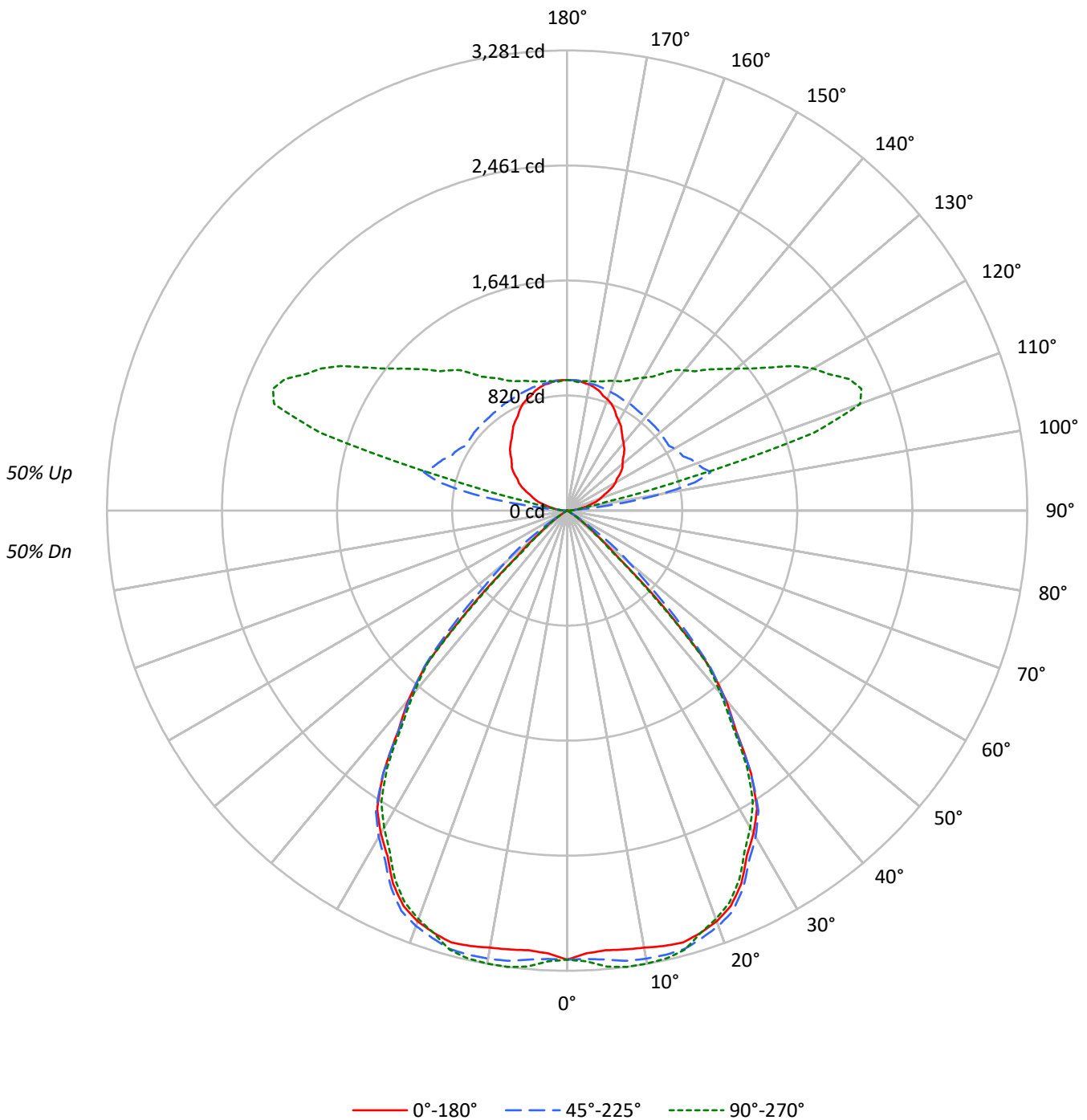
Lumens per Lamp: N/A
Luminaire Lumens: 9918.5 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	100	96	93	90	92	89	86	84	76	74	72	63	62	61	52	52	51	46				
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42				
3	86	78	72	67	79	73	67	63	63	59	56	53	51	49	45	43	42	38				
4	80	70	64	58	74	66	60	55	57	53	49	49	46	43	42	40	38	34				
5	74	64	57	52	68	60	54	49	52	48	44	45	42	39	39	36	34	31				
6	69	58	51	46	64	55	48	44	48	43	40	42	38	35	36	33	31	29				
7	64	53	46	41	59	50	44	39	44	39	36	38	35	32	33	31	29	26				
8	60	49	42	37	56	46	40	35	41	36	32	36	32	29	31	28	26	24				
9	56	45	38	34	52	42	36	32	38	33	29	33	29	27	29	26	24	22				
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20				

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	3.1
10°-20°	911.4	9.2
20°-30°	1348.7	13.6
30°-40°	1394.0	14.1
40°-50°	811.1	8.2
50°-60°	137.4	1.4
60°-70°	5.4	0.1
70°-80°	0.8	0.0
80°-90°	2.8	0.0
90°-100°	114.4	1.2
100°-110°	815.3	8.2
110°-120°	1106.9	11.2
120°-130°	900.9	9.1
130°-140°	724.6	7.3
140°-150°	571.2	5.8
150°-160°	417.7	4.2
160°-170°	259.4	2.6
170°-180°	88.5	0.9
0°-30°	2568.0	25.9
0°-40°	3962.0	39.9
0°-60°	4910.6	49.5
0°-90°	4919.5	49.6
90°-120°	2036.7	20.5
90°-150°	4233.4	42.7
90°-180°	4999.0	50.4
0°-180°	9918.5	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	6	12	18	18	2
95°	47	87	47	53	64	52
105°	181	279	1059	1353	896	191
115°	322	391	913	1898	2218	320
125°	462	525	860	1505	1779	411
135°	574	636	866	1239	1422	441
145°	679	736	872	1080	1194	426
155°	796	825	890	978	1024	365
165°	884	895	913	937	954	248
175°	931	936	931	925	919	88
180°	931	931	931	931	931	



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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	3.1	2.3	3.5	3.5
90°	0.0	5.7	11.7	17.6	17.6
92.5°	14.0	19.8	25.8	36.4	41.0
95°	46.8	86.9	46.8	52.9	64.4
97.5°	83.1	166.7	344.2	101.5	87.8
100°	111.2	208.5	690.6	203.3	134.6
102.5°	139.3	241.2	934.1	536.5	293.8
105°	181.4	278.7	1059.4	1353.3	895.5
107.5°	223.6	296.8	1011.4	1969.6	1844.8
110°	251.7	320.4	983.3	2069.6	2224.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	279.8	348.4	955.2	2011.1	2270.9
115°	321.9	390.6	913.1	1897.8	2218.3
117.5°	365.2	432.8	902.5	1775.1	2104.7
120°	398.0	461.0	883.8	1681.7	2025.1
122.5°	421.4	488.9	860.4	1601.5	1917.4
125°	462.4	525.3	860.4	1504.6	1779.3
127.5°	496.3	560.4	861.6	1392.1	1663.4
130°	515.1	583.7	866.2	1316.9	1574.4
132.5°	538.5	607.1	866.2	1283.1	1494.8
135°	573.6	636.5	866.2	1239.1	1422.3
137.5°	602.9	670.4	866.2	1190.5	1347.3
140°	626.3	689.2	866.2	1162.1	1305.2
142.5°	649.7	708.0	870.9	1129.1	1263.1
145°	678.9	736.2	872.1	1079.5	1194.0
147.5°	714.1	764.4	879.1	1043.8	1132.0
150°	737.5	783.3	883.8	1020.1	1094.5
152.5°	760.9	802.1	883.8	1001.1	1061.7
155°	796.0	824.6	889.6	978.5	1024.3
157.5°	824.1	851.6	896.7	964.1	997.3
160°	842.8	865.7	901.4	954.7	983.3
162.5°	856.9	879.8	906.0	949.8	969.2
165°	883.8	895.2	913.1	936.9	954.0
167.5°	899.0	909.3	918.9	930.9	941.2
170°	913.1	918.8	918.9	930.7	936.5
172.5°	917.7	928.0	923.6	926.1	931.8
175°	930.6	936.3	930.6	924.6	918.9
177.5°	930.6	935.2	930.6	930.5	925.9
180°	930.6	930.6	930.6	930.6	930.6

(END OF REPORT)