

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: P645125

Luminaire Tested: OMN4DIP-SR4F0-75D25U930-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P645125
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-SR4F0-75D25U930-BBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - BLACK BAFFLE WITH MEDIUM OPTIC - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

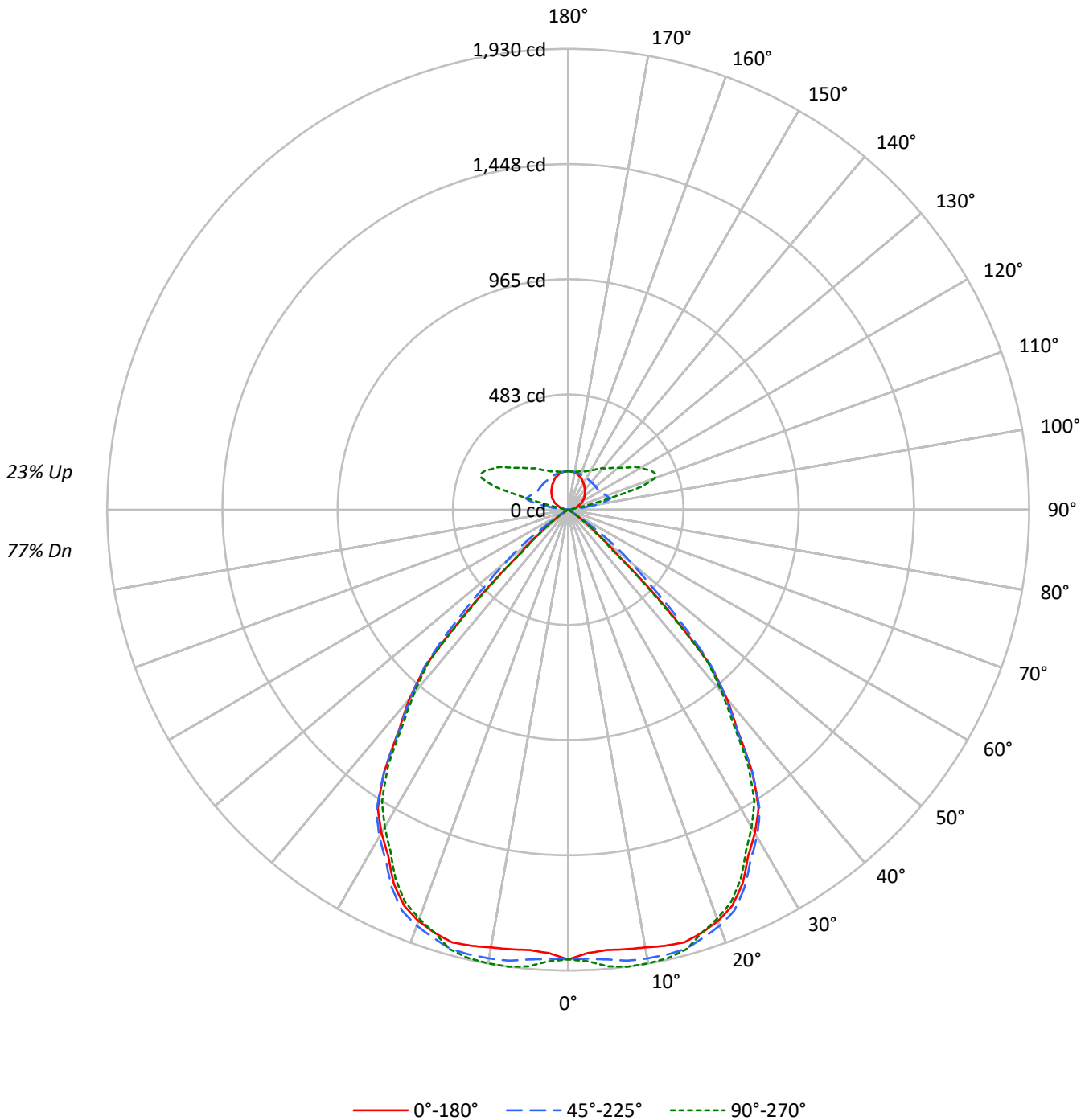
Lumens per Lamp: N/A
Luminaire Lumens: 3761.2 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 36.2
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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77				
1	107	103	101	98	102	99	96	94	91	89	87	83	82	80	76	75	74	71				
2	100	94	89	85	95	90	86	83	83	80	77	77	74	72	71	69	68	65				
3	93	86	80	75	89	83	77	73	77	73	69	71	68	65	66	63	61	59				
4	87	78	72	67	84	76	70	65	71	66	62	66	62	59	61	58	56	53				
5	82	72	65	60	78	69	63	59	65	60	56	61	57	53	57	54	51	49				
6	76	66	59	54	73	64	58	53	60	55	51	56	52	49	53	49	47	44				
7	71	61	54	49	69	59	53	48	55	50	46	52	48	44	49	45	43	41				
8	67	56	49	45	64	55	48	44	51	46	42	49	44	41	46	42	39	37				
9	63	52	45	41	61	51	44	40	48	42	39	45	41	37	43	39	36	34				
10	59	48	42	37	57	47	41	37	45	39	36	42	38	35	40	36	33	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24327	24327	24327
5°	24000	24515	24896
10°	24413	25031	25299
15°	25087	25460	25500
20°	25201	25484	25060
25°	24620	24893	24348
30°	23311	23573	22893
35°	21190	21190	20750
40°	17428	17254	16882
45°	10419	12246	9937
50°	3368	6824	3161
55°	1191	2283	1191
60°	75	646	39
65°	46	46	0
70°	57	0	0
75°	0	0	0
80°	0	0	0
85°	222	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 12246 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.2	4.8
10°-20°	536.1	14.3
20°-30°	793.4	21.1
30°-40°	820.1	21.8
40°-50°	477.2	12.7
50°-60°	80.8	2.1
60°-70°	3.2	0.1
70°-80°	0.5	0.0
80°-90°	0.8	0.0
90°-100°	19.9	0.5
100°-110°	141.6	3.8
110°-120°	192.2	5.1
120°-130°	156.4	4.2
130°-140°	125.8	3.3
140°-150°	99.2	2.6
150°-160°	72.5	1.9
160°-170°	45.0	1.2
170°-180°	15.4	0.4
0°-30°	1510.7	40.2
0°-40°	2330.9	62.0
0°-60°	2888.9	76.8
0°-90°	2893.3	76.9
90°-120°	353.6	9.4
90°-150°	735.0	19.5
90°-180°	868.0	23.1
0°-180°	3761.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1883	1883	1883	1883	1883	
5°	1851	1900	1891	1896	1920	177
15°	1876	1942	1904	1894	1907	528
25°	1728	1785	1747	1694	1708	789
35°	1344	1365	1344	1310	1316	823
45°	570	664	670	648	544	441
55°	53	62	101	57	53	58
65°	2	2	2	0	0	2
75°	0	1	0	0	0	1
85°	2	2	0	0	0	1
90°	0	1	2	3	3	0
95°	8	15	8	9	11	9
105°	32	48	184	235	156	33
115°	56	68	158	330	385	55
125°	80	91	149	261	309	71
135°	100	110	150	215	247	77
145°	118	128	151	187	207	74
155°	138	143	154	170	178	63
165°	154	155	158	163	166	43
175°	162	163	162	160	160	15
180°	162	162	162	162	162	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1883.4	1883.4	1883.4	1883.4	1883.4
2.5°	1858.7	1895.5	1882.2	1883.6	1892.8
5°	1851.0	1899.9	1890.7	1895.7	1920.1
7.5°	1856.6	1906.1	1904.8	1906.3	1930.1
10°	1861.3	1913.1	1908.4	1907.4	1928.9
12.5°	1870.7	1927.1	1908.4	1906.1	1924.2
15°	1876.0	1942.1	1903.9	1893.9	1906.9
17.5°	1858.1	1931.7	1879.8	1853.2	1858.4
20°	1833.4	1908.1	1854.0	1814.5	1823.1
22.5°	1794.6	1865.9	1817.5	1768.6	1779.6
25°	1727.5	1785.0	1746.6	1694.0	1708.4
27.5°	1632.2	1677.7	1653.4	1602.5	1611.4
30°	1562.9	1600.2	1580.5	1530.6	1534.9
32.5°	1482.9	1514.5	1493.5	1450.5	1450.2
35°	1343.8	1365.4	1343.8	1310.1	1315.9
37.5°	1161.8	1178.2	1156.2	1136.0	1138.8
40°	1033.6	1046.5	1023.3	1004.1	1001.2
42.5°	873.6	909.5	886.8	860.8	864.8
45°	570.4	663.9	670.4	647.5	544.0
47.5°	287.6	389.6	466.7	354.1	253.8
50°	167.6	229.4	339.6	187.5	157.3
52.5°	110.0	136.1	237.3	118.5	104.4
55°	52.9	61.6	101.4	57.2	52.9
57.5°	18.2	28.0	45.0	28.6	20.3
60°	2.9	11.6	25.0	8.7	1.5
62.5°	1.8	3.5	15.6	1.7	0.3
65°	1.5	1.5	1.5	0.0	0.0
67.5°	1.5	1.5	0.0	0.0	0.0
70°	1.5	1.5	0.0	0.0	0.0
72.5°	1.5	1.5	0.0	0.0	0.0
75°	0.0	1.4	0.0	0.0	0.0
77.5°	0.0	1.4	0.0	0.0	0.0
80°	0.0	1.4	0.0	0.0	0.0
82.5°	0.0	1.4	0.0	0.0	0.0
85°	1.5	1.5	0.0	0.0	0.0
87.5°	1.2	1.4	0.4	0.6	0.6
90°	0.0	1.0	2.0	3.0	3.0
92.5°	2.4	3.4	4.5	6.3	7.1
95°	8.1	15.1	8.1	9.2	11.2
97.5°	14.4	28.9	59.8	17.6	15.2
100°	19.3	36.2	119.9	35.3	23.4
102.5°	24.2	41.9	162.2	93.1	51.0
105°	31.5	48.4	183.9	235.0	155.5
107.5°	38.8	51.5	175.6	342.0	320.3
110°	43.7	55.6	170.7	359.3	386.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	48.6	60.5	165.8	349.2	394.3
115°	55.9	67.8	158.5	329.5	385.2
117.5°	63.4	75.1	156.7	308.2	365.4
120°	69.1	80.0	153.5	292.0	351.6
122.5°	73.2	84.9	149.4	278.1	332.9
125°	80.3	91.2	149.4	261.2	308.9
127.5°	86.2	97.3	149.6	241.7	288.8
130°	89.4	101.4	150.4	228.7	273.4
132.5°	93.5	105.4	150.4	222.8	259.5
135°	99.6	110.5	150.4	215.1	246.9
137.5°	104.7	116.4	150.4	206.7	233.9
140°	108.7	119.7	150.4	201.8	226.6
142.5°	112.8	122.9	151.2	196.1	219.3
145°	117.9	127.8	151.4	187.4	207.3
147.5°	124.0	132.7	152.6	181.2	196.5
150°	128.0	136.0	153.5	177.1	190.0
152.5°	132.1	139.3	153.5	173.8	184.3
155°	138.2	143.2	154.5	169.9	177.8
157.5°	143.1	147.9	155.7	167.4	173.2
160°	146.3	150.3	156.5	165.8	170.7
162.5°	148.8	152.8	157.3	164.9	168.3
165°	153.5	155.4	158.5	162.7	165.6
167.5°	156.1	157.9	159.5	161.6	163.4
170°	158.5	159.5	159.5	161.6	162.6
172.5°	159.3	161.1	160.4	160.8	161.8
175°	161.6	162.6	161.6	160.5	159.5
177.5°	161.6	162.4	161.6	161.6	160.8
180°	161.6	161.6	161.6	161.6	161.6

(END OF REPORT)