

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: P644945

Luminaire Tested: OMN4DIP-SR4F0-50D25U930-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644945
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-SR4F0-50D25U930-BBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - BLACK BAFFLE WITH MEDIUM OPTIC - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

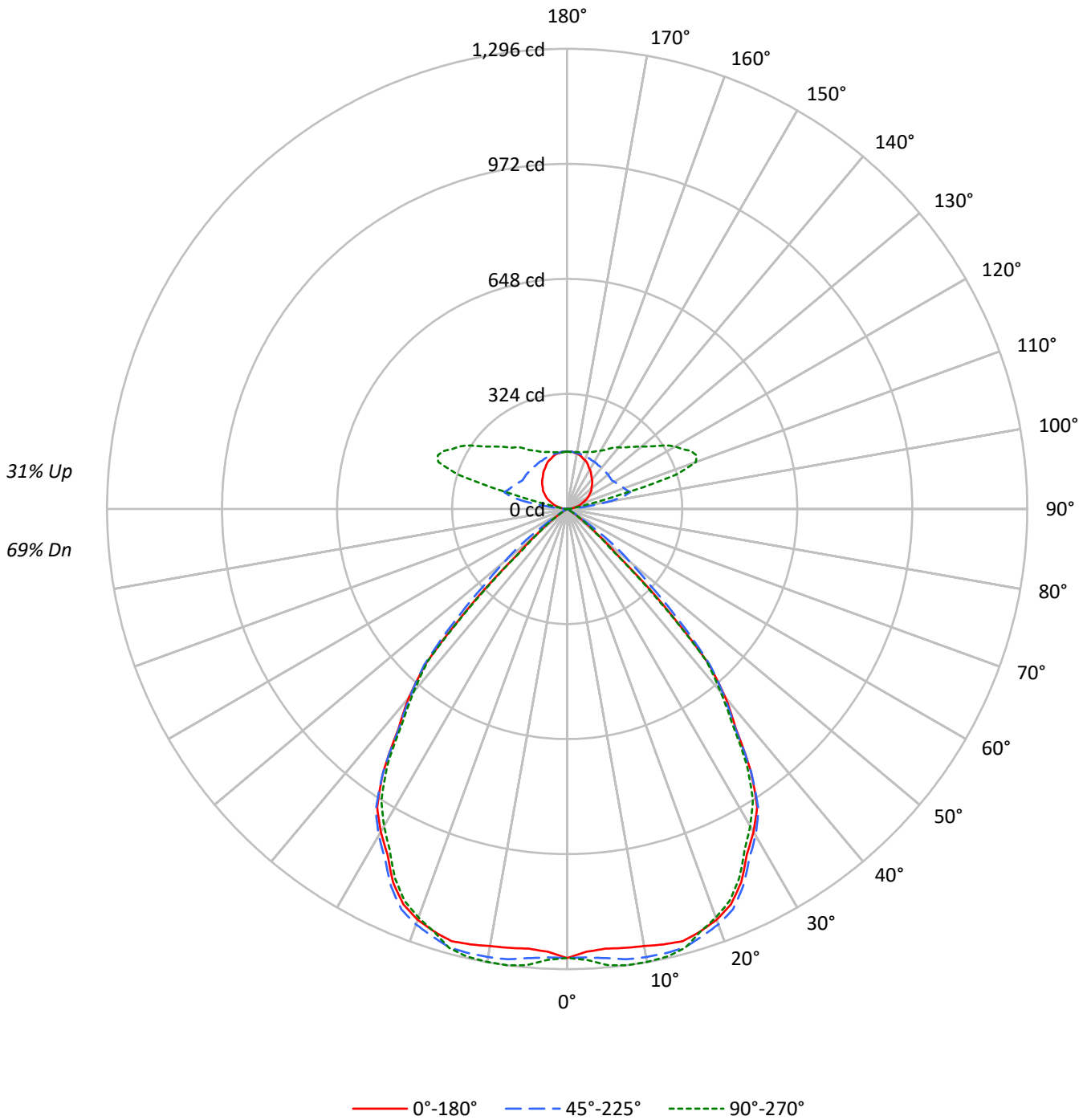
Lumens per Lamp: N/A
Luminaire Lumens: 2811.0 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 26.5
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	112	112	112	112	106	106	106	106	94	94	94	83	83	83	74	74	74	69				
1	105	101	98	96	99	96	94	91	86	85	83	78	76	75	69	68	68	64				
2	98	92	87	83	93	88	83	80	79	76	73	72	69	67	65	63	61	58				
3	91	84	78	73	86	80	75	70	73	69	65	66	63	60	60	58	56	53				
4	85	76	70	65	81	73	67	62	67	62	58	61	57	55	56	53	51	48				
5	79	69	63	58	75	67	60	56	61	56	53	56	52	49	52	49	46	44				
6	74	64	57	52	70	61	55	50	57	51	48	52	48	45	48	45	42	40				
7	69	59	52	47	66	56	50	46	52	47	43	48	44	41	45	41	39	37				
8	65	54	47	42	62	52	46	41	48	43	39	45	41	37	42	38	35	34				
9	61	50	43	39	58	48	42	38	45	40	36	42	37	34	39	35	33	31				
10	57	46	40	35	55	45	39	35	42	37	33	39	35	32	36	33	30	29				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16336	16336	16336
5°	16117	16462	16718
10°	16394	16808	16989
15°	16847	17097	17123
20°	16922	17113	16827
25°	16534	16716	16350
30°	15653	15829	15373
35°	14229	14229	13933
40°	11704	11586	11336
45°	6998	8224	6673
50°	2261	4584	2122
55°	799	1534	799
60°	52	434	26
65°	31	31	0
70°	38	0	0
75°	0	0	0
80°	0	0	0
85°	148	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 8224 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.7	4.3
10°-20°	360.0	12.8
20°-30°	532.8	19.0
30°-40°	550.7	19.6
40°-50°	320.4	11.4
50°-60°	54.3	1.9
60°-70°	2.1	0.1
70°-80°	0.3	0.0
80°-90°	0.6	0.0
90°-100°	19.9	0.7
100°-110°	141.6	5.0
110°-120°	192.2	6.8
120°-130°	156.4	5.6
130°-140°	125.8	4.5
140°-150°	99.2	3.5
150°-160°	72.5	2.6
160°-170°	45.0	1.6
170°-180°	15.4	0.5
0°-30°	1014.5	36.1
0°-40°	1565.2	55.7
0°-60°	1939.9	69.0
0°-90°	1943.0	69.1
90°-120°	353.6	12.6
90°-150°	735.0	26.1
90°-180°	868.0	30.9
0°-180°	2811.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1265	1265	1265	1265	1265	
5°	1243	1276	1270	1273	1289	119
15°	1260	1304	1278	1272	1280	354
25°	1160	1199	1173	1138	1147	530
35°	902	917	902	880	884	553
45°	383	446	450	435	365	296
55°	36	41	68	38	36	39
65°	1	1	1	0	0	1
75°	0	1	0	0	0	0
85°	1	1	0	0	0	0
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°	1264.7	1264.7	1264.7	1264.7	1264.7
2.5°	1248.1	1272.8	1263.9	1264.8	1271.0
5°	1243.0	1275.8	1269.6	1273.0	1289.4
7.5°	1246.7	1279.9	1279.1	1280.1	1296.1
10°	1249.9	1284.6	1281.5	1280.8	1295.3
12.5°	1256.2	1294.1	1281.5	1280.0	1292.1
15°	1259.8	1304.2	1278.5	1271.8	1280.5
17.5°	1247.7	1297.1	1262.3	1244.4	1247.9
20°	1231.1	1281.3	1245.0	1218.4	1224.2
22.5°	1205.1	1253.0	1220.5	1187.7	1195.0
25°	1160.1	1198.7	1172.9	1137.6	1147.2
27.5°	1096.1	1126.6	1110.3	1076.1	1082.1
30°	1049.5	1074.6	1061.3	1027.8	1030.7
32.5°	995.8	1017.0	1002.9	974.0	973.9
35°	902.4	916.9	902.4	879.8	883.6
37.5°	780.1	791.2	776.4	762.8	764.7
40°	694.1	702.7	687.1	674.3	672.3
42.5°	586.6	610.8	595.5	578.0	580.7
45°	383.1	445.8	450.2	434.8	365.3
47.5°	193.1	261.7	313.4	237.8	170.4
50°	112.5	154.1	228.1	125.9	105.6
52.5°	73.8	91.4	159.3	79.6	70.1
55°	35.5	41.3	68.1	38.4	35.5
57.5°	12.2	18.8	30.2	19.2	13.6
60°	2.0	7.8	16.8	5.8	1.0
62.5°	1.2	2.3	10.5	1.2	0.2
65°	1.0	1.0	1.0	0.0	0.0
67.5°	1.0	1.0	0.0	0.0	0.0
70°	1.0	1.0	0.0	0.0	0.0
72.5°	1.0	1.0	0.0	0.0	0.0
75°	0.0	1.0	0.0	0.0	0.0
77.5°	0.0	1.0	0.0	0.0	0.0
80°	0.0	1.0	0.0	0.0	0.0
82.5°	0.0	1.0	0.0	0.0	0.0
85°	1.0	1.0	0.0	0.0	0.0
87.5°	0.8	1.0	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)