

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: P644951

Luminaire Tested: OMN4DIP-SR4F0-50D25U935-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644951
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-SR4F0-50D25U935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

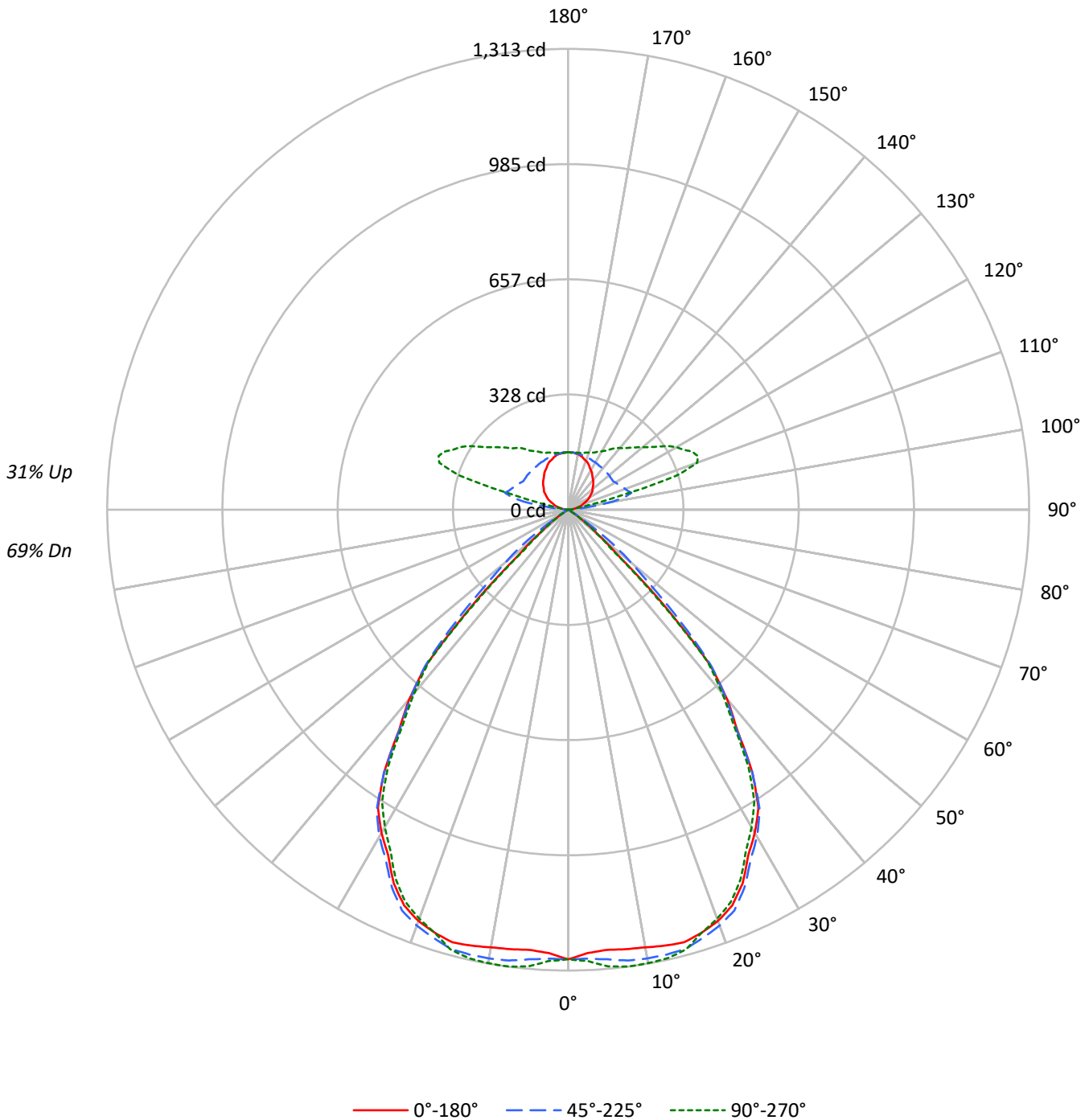
Lumens per Lamp: N/A
Luminaire Lumens: 2847.2 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 26.5
Input Voltage (V): 120
Input Current (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	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°	16546	16546	16546
5°	16324	16674	16934
10°	16605	17025	17208
15°	17063	17317	17344
20°	17141	17333	17045
25°	16746	16931	16561
30°	15855	16034	15571
35°	14412	14412	14113
40°	11854	11736	11483
45°	7088	8330	6759
50°	2291	4642	2150
55°	811	1554	811
60°	52	439	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: 8330 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	4.3
10°-20°	364.7	12.8
20°-30°	539.7	19.0
30°-40°	557.8	19.6
40°-50°	324.6	11.4
50°-60°	55.0	1.9
60°-70°	2.2	0.1
70°-80°	0.3	0.0
80°-90°	0.7	0.0
90°-100°	20.1	0.7
100°-110°	143.4	5.0
110°-120°	194.7	6.8
120°-130°	158.4	5.6
130°-140°	127.4	4.5
140°-150°	100.5	3.5
150°-160°	73.5	2.6
160°-170°	45.6	1.6
170°-180°	15.6	0.5
0°-30°	1027.6	36.1
0°-40°	1585.4	55.7
0°-60°	1964.9	69.0
0°-90°	1968.0	69.1
90°-120°	358.2	12.6
90°-150°	744.5	26.1
90°-180°	879.0	30.9
0°-180°	2847.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1259	1292	1286	1289	1306	121
15°	1276	1321	1295	1288	1297	359
25°	1175	1214	1188	1152	1162	537
35°	914	929	914	891	895	560
45°	388	452	456	440	370	300
55°	36	42	69	39	36	40
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	49	186	238	158	34
115°	57	69	161	334	390	56
125°	81	92	151	265	313	72
135°	101	112	152	218	250	78
145°	119	130	153	190	210	75
155°	140	145	156	172	180	64
165°	155	157	161	165	168	44
175°	164	165	164	163	162	15
180°	164	164	164	164	164	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1281.0	1281.0	1281.0	1281.0	1281.0
2.5°	1264.2	1289.2	1280.2	1281.1	1287.4
5°	1259.0	1292.2	1286.0	1289.4	1306.0
7.5°	1262.8	1296.4	1295.6	1296.6	1312.8
10°	1266.0	1301.2	1298.0	1297.3	1312.0
12.5°	1272.4	1310.7	1298.0	1296.5	1308.8
15°	1276.0	1321.0	1295.0	1288.2	1297.0
17.5°	1263.8	1313.9	1278.6	1260.5	1264.0
20°	1247.0	1297.8	1261.0	1234.1	1240.0
22.5°	1220.6	1269.1	1236.2	1203.0	1210.4
25°	1175.0	1214.1	1188.0	1152.2	1162.0
27.5°	1110.2	1141.1	1124.6	1089.9	1096.0
30°	1063.0	1088.4	1075.0	1041.1	1044.0
32.5°	1008.6	1030.1	1015.8	986.6	986.4
35°	914.0	928.7	914.0	891.1	895.0
37.5°	790.2	801.3	786.4	772.6	774.6
40°	703.0	711.8	696.0	683.0	681.0
42.5°	594.2	618.6	603.2	585.5	588.2
45°	388.0	451.6	456.0	440.4	370.0
47.5°	195.6	265.0	317.4	240.8	172.6
50°	114.0	156.0	231.0	127.5	107.0
52.5°	74.8	92.6	161.4	80.6	71.0
55°	36.0	41.9	69.0	38.9	36.0
57.5°	12.4	19.0	30.6	19.5	13.8
60°	2.0	7.9	17.0	5.9	1.0
62.5°	1.2	2.4	10.6	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	2.1	3.1	3.1
92.5°	2.5	3.5	4.5	6.4	7.2
95°	8.2	15.3	8.2	9.3	11.3
97.5°	14.6	29.3	60.5	17.9	15.4
100°	19.6	36.7	121.5	35.8	23.7
102.5°	24.5	42.4	164.3	94.3	51.7
105°	31.9	49.0	186.3	238.0	157.5
107.5°	39.3	52.2	177.9	346.4	324.4
110°	44.3	56.3	172.9	364.0	391.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	49.2	61.3	168.0	353.7	399.4
115°	56.6	68.7	160.6	333.8	390.1
117.5°	64.2	76.1	158.7	312.2	370.1
120°	70.0	81.1	155.4	295.8	356.1
122.5°	74.1	86.0	151.3	281.7	337.2
125°	81.3	92.4	151.3	264.6	312.9
127.5°	87.3	98.6	151.5	244.8	292.5
130°	90.6	102.7	152.3	231.6	276.9
132.5°	94.7	106.8	152.3	225.7	262.9
135°	100.9	111.9	152.3	217.9	250.1
137.5°	106.0	117.9	152.3	209.4	237.0
140°	110.1	121.2	152.3	204.4	229.5
142.5°	114.3	124.5	153.2	198.6	222.1
145°	119.4	129.5	153.4	189.9	210.0
147.5°	125.6	134.4	154.6	183.6	199.1
150°	129.7	137.7	155.4	179.4	192.5
152.5°	133.8	141.1	155.4	176.1	186.7
155°	140.0	145.0	156.5	172.1	180.1
157.5°	144.9	149.8	157.7	169.6	175.4
160°	148.2	152.3	158.5	167.9	172.9
162.5°	150.7	154.7	159.3	167.0	170.5
165°	155.4	157.4	160.6	164.8	167.8
167.5°	158.1	159.9	161.6	163.7	165.5
170°	160.6	161.6	161.6	163.7	164.7
172.5°	161.4	163.2	162.4	162.9	163.9
175°	163.7	164.7	163.7	162.6	161.6
177.5°	163.7	164.5	163.7	163.6	162.8
180°	163.7	163.7	163.7	163.7	163.7

(END OF REPORT)