

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: P645011

Luminaire Tested: OMN4DIP-SR4F0-50D75U935-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P645011
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-SR4F0-50D75U935-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 - 750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

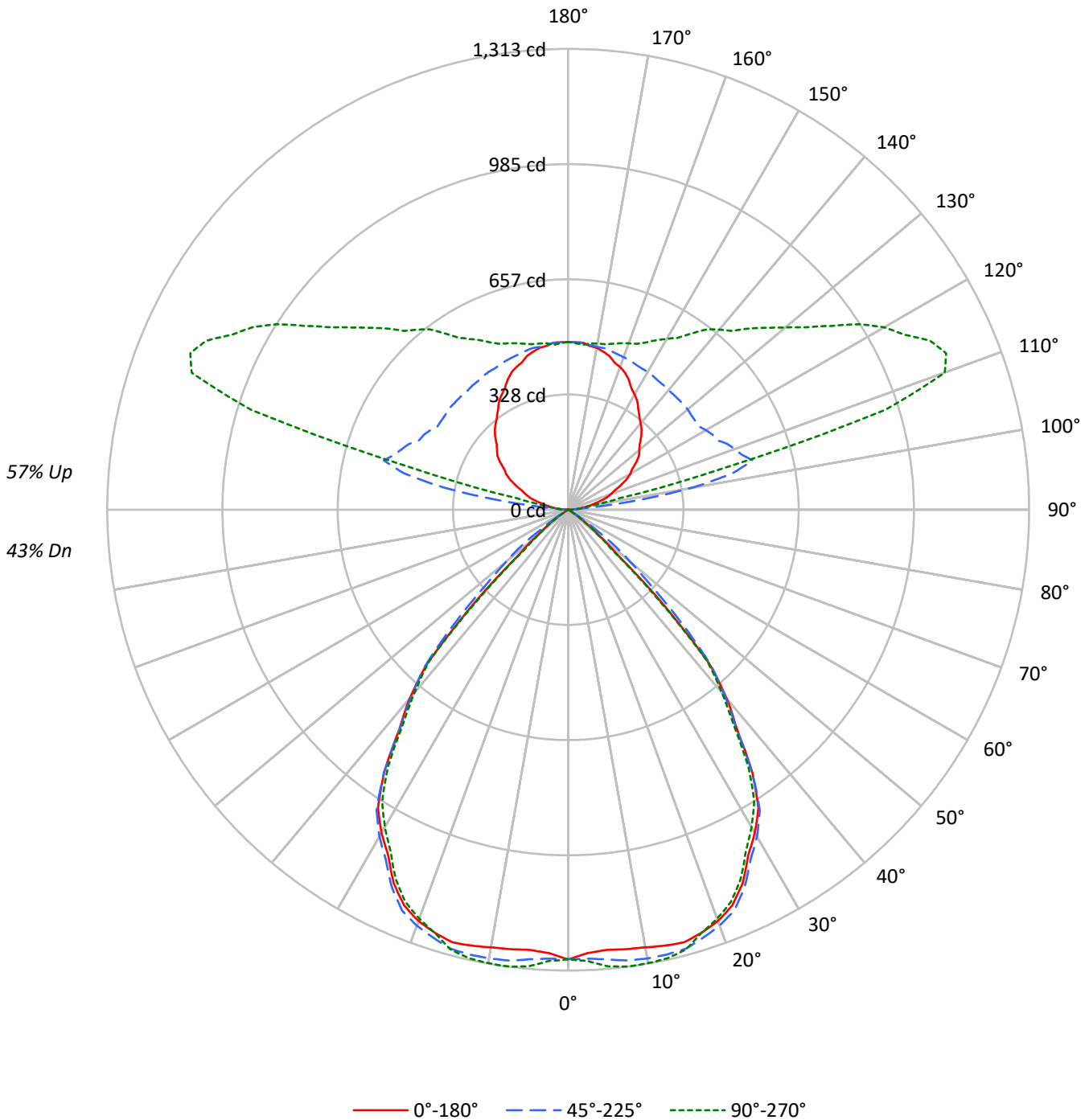
Lumens per Lamp: N/A
Luminaire Lumens: 4533.5 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 39
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										
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	50	30	10	0														
RCR																																						
0	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	43						43														
1	98	94	91	88	90	87	84	82	72	70	69	59	58	57	47	46	46	40						40														
2	91	85	79	75	83	78	74	70	65	62	60	54	52	50	43	42	41	36						36														
3	84	76	70	65	77	70	65	61	59	56	53	49	47	45	40	39	37	33						33														
4	78	68	62	56	71	63	58	53	54	50	46	45	42	40	37	35	34	30						30														
5	72	62	55	50	66	58	51	47	49	45	41	42	38	36	34	32	31	27						27														
6	67	56	49	44	62	52	46	42	45	40	37	38	35	32	32	30	28	25						25														
7	62	51	44	39	57	48	42	37	41	37	33	35	32	29	30	27	25	23						23														
8	58	47	40	35	54	44	38	34	38	33	30	33	29	27	28	25	23	21						21														
9	54	43	36	32	50	41	34	30	35	31	27	30	27	24	26	23	21	19						19														
10	51	40	33	29	47	37	32	28	33	28	25	28	25	22	24	22	20	18						18														

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	2.7
10°-20°	364.7	8.0
20°-30°	539.7	11.9
30°-40°	557.8	12.3
40°-50°	324.6	7.2
50°-60°	55.0	1.2
60°-70°	2.2	0.0
70°-80°	0.3	0.0
80°-90°	1.4	0.0
90°-100°	58.7	1.3
100°-110°	418.3	9.2
110°-120°	567.9	12.5
120°-130°	462.2	10.2
130°-140°	371.7	8.2
140°-150°	293.1	6.5
150°-160°	214.3	4.7
160°-170°	133.1	2.9
170°-180°	45.4	1.0
0°-30°	1027.6	22.7
0°-40°	1585.4	35.0
0°-60°	1964.9	43.3
0°-90°	1968.7	43.4
90°-120°	1044.9	23.0
90°-150°	2171.9	47.9
90°-180°	2565.0	56.6
0°-180°	4533.5	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	3	6	9	9	1
95°	24	45	24	27	33	27
105°	93	143	544	694	459	98
115°	165	200	468	974	1138	164
125°	237	270	441	772	913	211
135°	294	327	444	636	730	226
145°	348	378	447	554	613	219
155°	408	423	456	502	526	187
165°	453	459	468	481	490	127
175°	478	480	478	474	471	45
180°	478	478	478	478	478	



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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	1.4	1.2	1.8	1.8
90°	0.0	2.9	6.0	9.0	9.0
92.5°	7.2	10.1	13.2	18.7	21.0
95°	24.0	44.6	24.0	27.2	33.0
97.5°	42.6	85.5	176.6	52.1	45.0
100°	57.1	107.0	354.3	104.3	69.1
102.5°	71.5	123.7	479.3	275.2	150.7
105°	93.1	143.0	543.5	694.3	459.4
107.5°	114.7	152.3	518.9	1010.5	946.5
110°	129.1	164.4	504.5	1061.8	1141.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	143.5	178.8	490.1	1031.8	1165.1
115°	165.2	200.4	468.4	973.7	1138.1
117.5°	187.4	222.0	463.0	910.7	1079.8
120°	204.2	236.5	453.4	862.8	1039.0
122.5°	216.2	250.9	441.4	821.7	983.7
125°	237.2	269.5	441.4	771.9	912.9
127.5°	254.6	287.5	442.0	714.2	853.4
130°	264.3	299.5	444.4	675.6	807.8
132.5°	276.3	311.5	444.4	658.3	766.9
135°	294.3	326.6	444.4	635.7	729.7
137.5°	309.3	343.9	444.4	610.8	691.3
140°	321.3	353.6	444.4	596.2	669.6
142.5°	333.3	363.3	446.8	579.3	648.0
145°	348.3	377.7	447.4	553.9	612.6
147.5°	366.3	392.2	451.0	535.5	580.8
150°	378.4	401.8	453.4	523.4	561.5
152.5°	390.4	411.5	453.4	513.6	544.7
155°	408.4	423.1	456.4	502.0	525.5
157.5°	422.8	436.9	460.0	494.7	511.7
160°	432.4	444.2	462.4	489.8	504.5
162.5°	439.6	451.4	464.8	487.3	497.3
165°	453.4	459.3	468.4	480.7	489.5
167.5°	461.2	466.5	471.4	477.6	482.9
170°	468.4	471.4	471.4	477.5	480.5
172.5°	470.8	476.1	473.8	475.1	478.1
175°	477.5	480.4	477.5	474.4	471.4
177.5°	477.5	479.8	477.5	477.4	475.1
180°	477.5	477.5	477.5	477.5	477.5

(END OF REPORT)