

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: P645000

Luminaire Tested: OMN4DIP-SR4F0-50D75U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645000
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-50D75U835-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

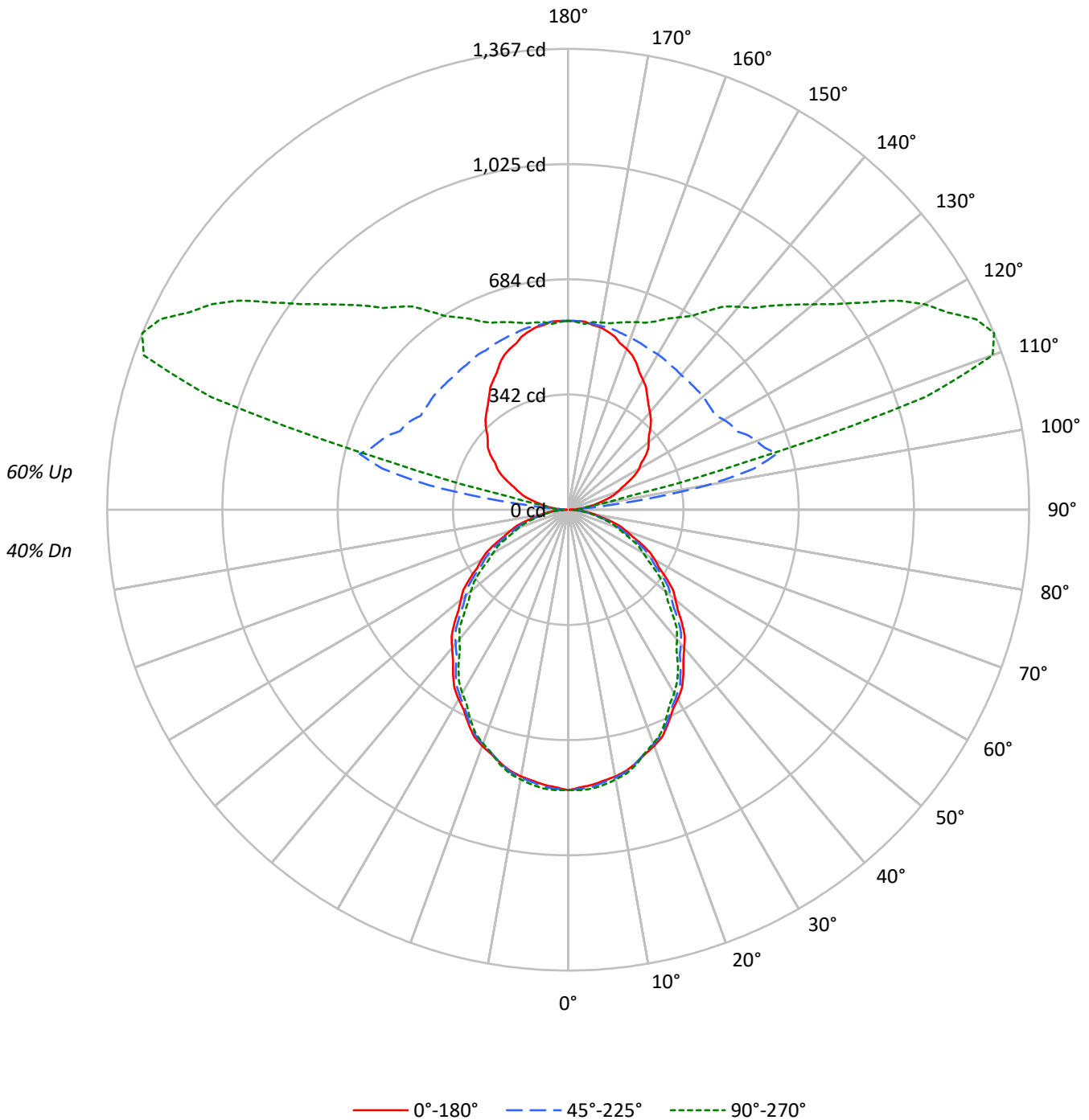
Lumens per Lamp: N/A
Luminaire Lumens: 5039.8 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 35.1
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	0
RCR																		
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	88	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	34	28
3	79	70	63	57	72	64	58	53	53	48	45	42	39	37	33	30	29	24
4	73	62	54	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	55	47	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18
6	61	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13430	13430	13430
5°	13279	13371	13462
10°	13173	13229	13321
15°	12996	12996	13071
20°	12814	12716	12677
25°	12479	12378	12218
30°	12111	11941	11710
35°	11734	11442	11176
40°	11282	10947	10566
45°	10905	10492	9974
50°	10432	9977	9465
55°	10035	9526	8952
60°	9574	9064	8296
65°	9077	8432	7782
70°	8601	7799	7265
75°	8047	7130	6775
80°	7364	6527	6211
85°	6910	6076	5669

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10905 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	1.6
10°-20°	219.6	4.4
20°-30°	319.3	6.3
30°-40°	363.2	7.2
40°-50°	354.1	7.0
50°-60°	302.2	6.0
60°-70°	219.6	4.4
70°-80°	124.2	2.5
80°-90°	39.5	0.8
90°-100°	73.7	1.5
100°-110°	493.6	9.8
110°-120°	668.1	13.3
120°-130°	543.3	10.8
130°-140°	436.3	8.7
140°-150°	343.9	6.8
150°-160°	251.5	5.0
160°-170°	156.2	3.1
170°-180°	53.3	1.1
0°-30°	617.1	12.2
0°-40°	980.2	19.4
0°-60°	1636.6	32.5
0°-90°	2019.9	40.1
90°-120°	1235.3	24.5
90°-150°	2558.9	50.8
90°-180°	3020.0	59.9
0°-180°	5039.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	819	832	825	824	831	78
15°	778	787	778	776	782	219
25°	700	707	695	682	686	322
35°	595	598	580	567	567	372
45°	478	475	460	444	437	368
55°	356	355	338	322	318	318
65°	238	235	221	207	204	236
75°	129	125	114	110	109	137
85°	37	33	33	32	31	40
90°	4	9	14	16	16	6
95°	37	57	32	35	41	38
105°	115	171	640	816	539	122
115°	197	237	551	1143	1336	196
125°	281	318	519	906	1071	249
135°	345	383	522	746	856	266
145°	409	443	525	650	719	257
155°	479	496	536	589	617	220
165°	532	539	550	564	574	149
175°	560	564	560	557	553	53
180°	560	560	560	560	560	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	831.8	831.8	831.8	831.8	831.8
2.5°	824.5	835.2	829.1	829.1	832.7
5°	819.3	831.5	825.0	824.0	830.6
7.5°	810.7	822.7	815.0	813.9	822.5
10°	803.5	814.5	806.9	804.8	812.5
12.5°	793.5	804.6	796.9	793.9	801.7
15°	777.5	787.4	777.5	776.4	782.0
17.5°	759.3	768.0	756.4	752.7	756.9
20°	745.8	753.5	740.1	734.5	737.8
22.5°	728.6	736.3	722.0	713.7	717.9
25°	700.5	707.1	694.8	682.5	685.8
27.5°	670.4	675.5	663.2	650.5	651.6
30°	649.6	652.9	640.5	627.0	628.1
32.5°	627.8	630.3	617.0	602.5	602.7
35°	595.3	597.5	580.5	567.0	567.0
37.5°	560.6	562.0	543.9	529.1	527.6
40°	535.3	537.5	519.4	504.6	501.3
42.5°	511.7	512.2	495.9	481.1	476.9
45°	477.6	475.4	459.5	443.5	436.8
47.5°	440.7	440.7	422.6	406.6	400.4
50°	415.3	415.3	397.2	381.3	376.8
52.5°	391.8	390.9	373.7	357.7	351.5
55°	356.5	355.4	338.4	322.4	318.0
57.5°	319.1	319.1	303.3	286.2	281.3
60°	296.5	296.5	280.7	263.5	256.9
62.5°	272.1	271.2	255.3	240.0	236.1
65°	237.6	235.4	220.7	207.0	203.7
67.5°	204.8	202.6	187.0	176.0	173.8
70°	182.2	180.0	165.2	156.1	153.9
72.5°	160.5	157.4	144.4	137.1	134.9
75°	129.0	124.6	114.3	109.7	108.6
77.5°	99.1	91.6	87.4	84.2	83.1
80°	79.2	72.6	70.2	67.9	66.8
82.5°	62.0	55.4	54.8	53.4	52.3
85°	37.3	32.9	32.8	31.7	30.6
87.5°	16.3	14.6	15.4	15.9	15.9
90°	4.5	9.1	13.8	16.2	16.2
92.5°	16.6	17.6	20.5	26.6	28.5
95°	37.2	56.9	31.6	35.2	41.0
97.5°	58.0	104.9	210.4	63.1	54.0
100°	74.9	130.1	418.1	123.5	82.2
102.5°	90.9	148.9	564.7	324.1	177.1
105°	114.9	171.3	640.1	815.9	539.1
107.5°	140.0	182.1	611.2	1186.9	1110.7
110°	156.0	196.3	594.3	1247.1	1339.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	173.0	213.2	577.3	1211.9	1367.2
115°	197.2	237.4	550.8	1142.6	1335.5
117.5°	223.3	262.8	544.5	1068.7	1267.1
120°	243.0	279.8	533.2	1012.5	1219.2
122.5°	256.2	296.6	519.1	964.2	1154.4
125°	280.6	318.5	519.1	905.8	1071.2
127.5°	299.9	339.4	519.8	838.1	1001.5
130°	311.2	352.6	522.6	792.8	947.9
132.5°	324.4	365.8	521.7	772.5	900.0
135°	345.3	383.2	521.5	746.0	856.3
137.5°	362.9	403.6	521.5	716.8	811.2
140°	377.0	414.9	521.5	699.7	785.8
142.5°	391.1	426.3	524.3	679.8	760.4
145°	408.8	443.2	525.0	649.9	718.8
147.5°	429.9	460.2	529.3	628.4	681.5
150°	444.0	471.6	532.1	614.2	658.9
152.5°	458.1	482.9	532.1	602.7	639.2
155°	479.2	496.5	535.6	589.1	616.7
157.5°	496.1	512.7	539.8	580.5	600.4
160°	507.4	521.2	542.7	574.8	592.0
162.5°	515.9	529.7	545.5	571.8	583.5
165°	532.1	539.0	549.7	564.0	574.4
167.5°	541.2	547.5	553.2	560.4	566.6
170°	549.7	553.2	553.2	560.4	563.8
172.5°	552.5	558.7	556.0	557.5	561.0
175°	560.3	563.7	560.3	556.7	553.2
177.5°	560.3	563.0	560.3	560.2	557.5
180°	560.3	560.3	560.3	560.3	560.3

(END OF REPORT)