

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: P644996

Luminaire Tested: OMN4DIP-SR4F0-50D75U830-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644996
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-SR4F0-50D75U830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

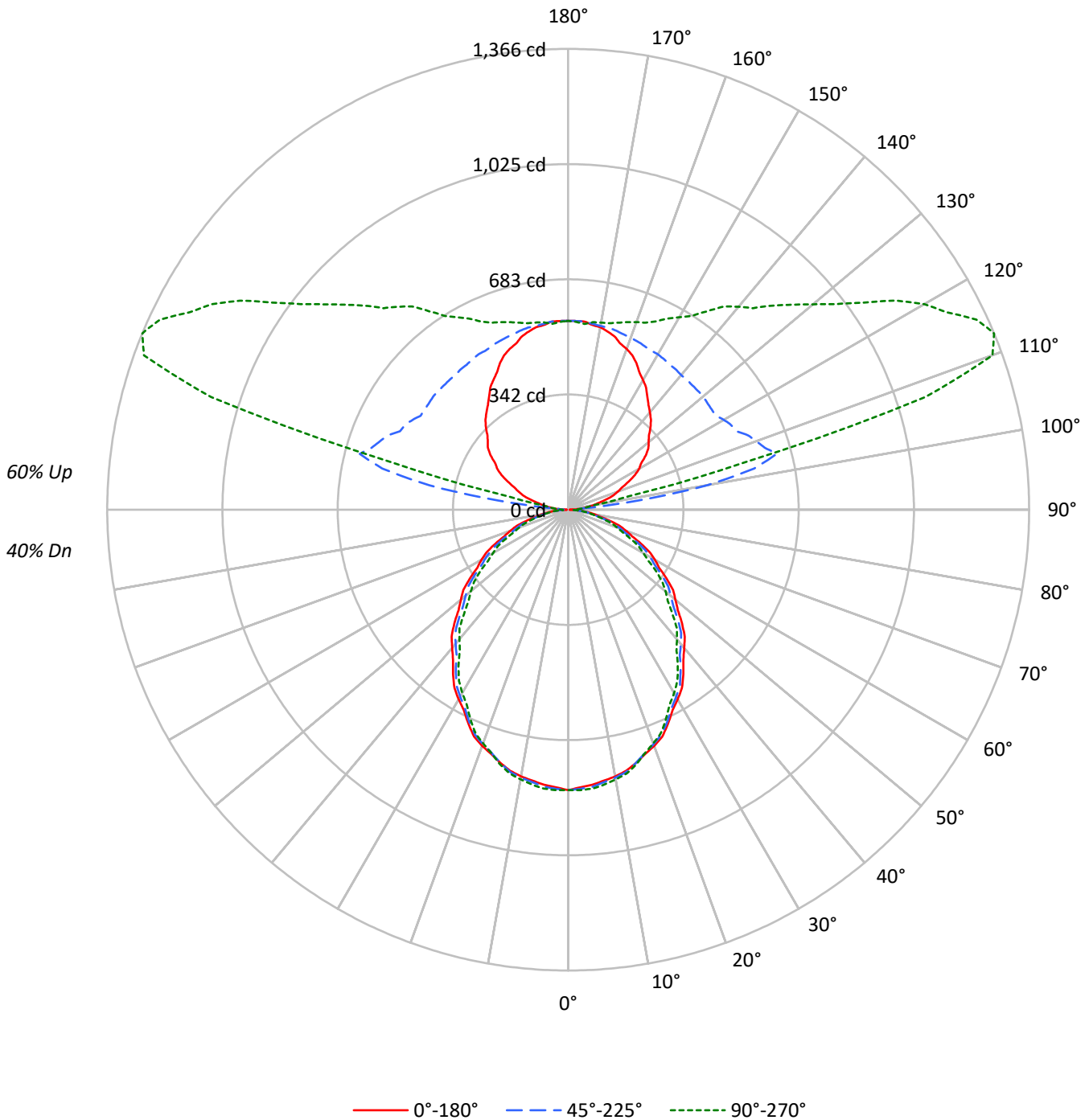
Lumens per Lamp: N/A
Luminaire Lumens: 5035.2 lumens
Efficiency: N/A
Efficacy: 143.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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										
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	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°	13417	13417	13417
5°	13267	13358	13451
10°	13162	13218	13309
15°	12985	12985	13060
20°	12802	12704	12667
25°	12469	12367	12207
30°	12100	11930	11699
35°	11722	11432	11166
40°	11272	10939	10557
45°	10894	10481	9965
50°	10422	9970	9457
55°	10027	9517	8943
60°	9565	9055	8289
65°	9070	8424	7775
70°	8592	7794	7260
75°	8041	7124	6769
80°	7355	6518	6202
85°	6910	6076	5650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10894 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	1.6
10°-20°	219.4	4.4
20°-30°	319.0	6.3
30°-40°	362.8	7.2
40°-50°	353.8	7.0
50°-60°	302.0	6.0
60°-70°	219.4	4.4
70°-80°	124.1	2.5
80°-90°	39.5	0.8
90°-100°	73.6	1.5
100°-110°	493.1	9.8
110°-120°	667.4	13.3
120°-130°	542.9	10.8
130°-140°	435.9	8.7
140°-150°	343.6	6.8
150°-160°	251.2	5.0
160°-170°	156.1	3.1
170°-180°	53.2	1.1
0°-30°	616.5	12.2
0°-40°	979.3	19.5
0°-60°	1635.1	32.5
0°-90°	2018.1	40.1
90°-120°	1234.2	24.5
90°-150°	2556.6	50.8
90°-180°	3017.0	59.9
0°-180°	5035.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	831	831	831	831	831	
5°	819	831	824	823	830	78
15°	777	787	777	776	781	219
25°	700	706	694	682	685	322
35°	595	597	580	566	566	371
45°	477	475	459	443	436	367
55°	356	355	338	322	318	318
65°	237	235	220	207	204	236
75°	129	124	114	110	108	137
85°	37	33	33	32	30	40
90°	4	9	14	16	16	6
95°	37	57	32	35	41	38
105°	115	171	640	815	539	122
115°	197	237	550	1142	1334	196
125°	280	318	519	905	1070	249
135°	345	383	521	745	856	266
145°	408	443	525	649	718	257
155°	479	496	535	589	616	220
165°	532	538	549	564	574	149
175°	560	563	560	556	553	53
180°	560	560	560	560	560	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	831.0	831.0	831.0	831.0	831.0
2.5°	823.8	834.4	828.3	828.4	831.9
5°	818.6	830.7	824.2	823.3	829.9
7.5°	810.0	821.9	814.3	813.1	821.8
10°	802.8	813.8	806.2	804.1	811.8
12.5°	792.8	803.9	796.2	793.2	800.9
15°	776.8	786.7	776.8	775.7	781.3
17.5°	758.7	767.3	755.7	752.0	756.2
20°	745.1	752.8	739.4	733.9	737.2
22.5°	727.9	735.6	721.4	713.1	717.3
25°	699.9	706.5	694.2	681.9	685.2
27.5°	669.8	674.9	662.6	649.9	651.0
30°	649.0	652.3	639.9	626.4	627.5
32.5°	627.3	629.7	616.4	602.0	602.2
35°	594.7	596.9	580.0	566.5	566.5
37.5°	560.1	561.4	543.4	528.7	527.1
40°	534.8	537.0	519.0	504.2	500.9
42.5°	511.3	511.7	495.4	480.7	476.5
45°	477.1	474.9	459.0	443.1	436.4
47.5°	440.3	440.3	422.2	406.2	400.0
50°	414.9	414.9	396.9	380.9	376.5
52.5°	391.4	390.5	373.3	357.4	351.2
55°	356.2	355.0	338.1	322.1	317.7
57.5°	318.8	318.8	303.0	285.9	281.1
60°	296.2	296.2	280.4	263.3	256.7
62.5°	271.8	270.9	255.1	239.8	235.9
65°	237.4	235.2	220.5	206.8	203.5
67.5°	204.6	202.4	186.8	175.9	173.7
70°	182.0	179.8	165.1	156.0	153.8
72.5°	160.3	157.2	144.3	137.0	134.8
75°	128.9	124.5	114.2	109.6	108.5
77.5°	99.0	91.5	87.3	84.1	83.0
80°	79.1	72.5	70.1	67.8	66.7
82.5°	62.0	55.3	54.7	53.3	52.2
85°	37.3	32.9	32.8	31.6	30.5
87.5°	16.3	14.5	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°	57.9	104.8	210.2	63.1	53.9
100°	74.8	130.0	417.7	123.4	82.1
102.5°	90.8	148.8	564.1	323.8	177.0
105°	114.8	171.1	639.5	815.1	538.6
107.5°	139.9	182.0	610.6	1185.8	1109.7
110°	155.9	196.1	593.7	1246.0	1337.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	172.8	213.0	576.8	1210.8	1366.0
115°	197.0	237.2	550.3	1141.5	1334.3
117.5°	223.1	262.6	544.0	1067.7	1266.0
120°	242.8	279.6	532.7	1011.6	1218.1
122.5°	256.0	296.4	518.7	963.3	1153.3
125°	280.4	318.3	518.7	905.0	1070.3
127.5°	299.7	339.1	519.4	837.4	1000.5
130°	310.9	352.2	522.2	792.1	947.0
132.5°	324.1	365.4	521.3	771.8	899.2
135°	345.0	382.9	521.0	745.3	855.5
137.5°	362.6	403.2	521.0	716.1	810.4
140°	376.7	414.6	521.0	699.0	785.1
142.5°	390.8	425.9	523.9	679.2	759.7
145°	408.4	442.8	524.6	649.4	718.2
147.5°	429.5	459.8	528.8	627.9	680.9
150°	443.6	471.1	531.6	613.6	658.3
152.5°	457.7	482.5	531.6	602.1	638.6
155°	478.8	496.0	535.1	588.6	616.1
157.5°	495.7	512.2	539.4	579.9	599.9
160°	507.0	520.7	542.2	574.2	591.5
162.5°	515.4	529.2	545.0	571.3	583.0
165°	531.6	538.5	549.2	563.5	573.9
167.5°	540.8	547.0	552.7	559.9	566.1
170°	549.2	552.7	552.7	559.9	563.3
172.5°	552.0	558.2	555.5	557.0	560.5
175°	559.8	563.2	559.8	556.2	552.7
177.5°	559.8	562.5	559.8	559.7	557.0
180°	559.8	559.8	559.8	559.8	559.8

(END OF REPORT)