

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: P644979

Luminaire Tested: OMN4DIP-SR4F0-50D50U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644979
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-SR4F0-50D50U930-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

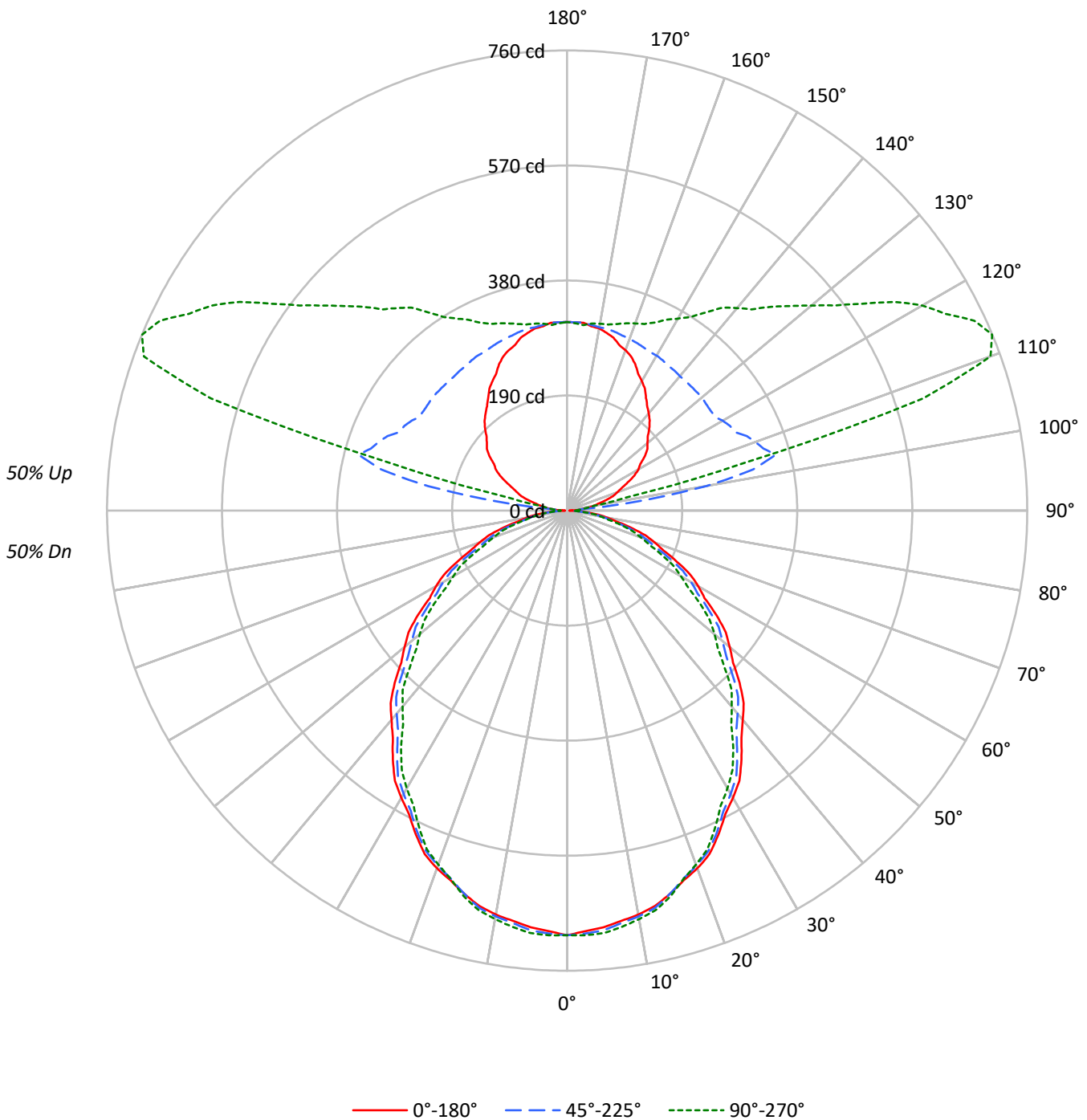
Lumens per Lamp: N/A
Luminaire Lumens: 3383.6 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.9
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50				
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	50	49	48	42				
2	89	82	76	71	82	76	70	66	64	60	57	54	51	49	44	42	40	36				
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	39	37	34	30				
4	75	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30	26				
5	69	57	49	43	63	53	46	40	45	40	36	38	34	31	32	29	26	23				
6	63	51	43	37	58	48	40	35	41	35	31	35	30	27	29	26	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	32	27	24	26	23	21	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	24	21	18	16				
9	51	38	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15				
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11323	11323	11323
5°	11196	11274	11352
10°	11108	11155	11232
15°	10957	10957	11022
20°	10804	10723	10689
25°	10523	10438	10302
30°	10211	10069	9874
35°	9893	9648	9424
40°	9512	9232	8909
45°	9195	8846	8410
50°	8796	8412	7983
55°	8462	8031	7547
60°	8073	7640	6994
65°	7656	7110	6564
70°	7251	6576	6128
75°	6787	6014	5714
80°	6211	5504	5235
85°	5835	5132	4780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9195 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	1.9
10°-20°	185.1	5.5
20°-30°	269.2	8.0
30°-40°	306.2	9.0
40°-50°	298.6	8.8
50°-60°	254.8	7.5
60°-70°	185.2	5.5
70°-80°	104.7	3.1
80°-90°	32.9	1.0
90°-100°	42.3	1.3
100°-110°	275.0	8.1
110°-120°	371.7	11.0
120°-130°	302.2	8.9
130°-140°	242.5	7.2
140°-150°	191.1	5.6
150°-160°	139.7	4.1
160°-170°	86.8	2.6
170°-180°	29.6	0.9
0°-30°	520.3	15.4
0°-40°	826.5	24.4
0°-60°	1379.9	40.8
0°-90°	1702.8	50.3
90°-120°	689.0	20.4
90°-150°	1424.7	42.1
90°-180°	1681.0	49.7
0°-180°	3383.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	691	701	696	695	700	65
15°	656	664	656	655	659	185
25°	591	596	586	576	578	272
35°	502	504	490	478	478	313
45°	403	401	387	374	368	310
55°	301	300	285	272	268	268
65°	200	198	186	175	172	199
75°	109	105	96	92	92	115
85°	32	28	28	27	26	34
90°	4	7	10	11	11	5
95°	23	33	18	20	23	23
105°	66	96	356	454	300	69
115°	110	133	306	635	742	110
125°	157	178	289	503	595	139
135°	192	213	290	414	476	148
145°	227	246	292	361	399	143
155°	266	276	298	327	343	122
165°	296	300	305	313	319	83
175°	311	313	311	309	307	29
180°	311	311	311	311	311	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	701.3	701.3	701.3	701.3	701.3
2.5°	695.2	704.2	699.1	699.1	702.1
5°	690.8	701.1	695.6	694.8	700.4
7.5°	683.6	693.7	687.2	686.2	693.5
10°	677.5	686.8	680.4	678.6	685.1
12.5°	669.1	678.4	672.0	669.4	676.0
15°	655.5	663.9	655.5	654.7	659.4
17.5°	640.3	647.6	637.8	634.6	638.2
20°	628.8	635.4	624.1	619.3	622.1
22.5°	614.3	620.9	608.8	601.8	605.4
25°	590.7	596.3	585.9	575.5	578.3
27.5°	565.3	569.6	559.2	548.5	549.4
30°	547.7	550.5	540.1	528.7	529.6
32.5°	529.4	531.4	520.2	508.0	508.2
35°	501.9	503.8	489.5	478.1	478.1
37.5°	472.7	473.8	458.6	446.2	444.9
40°	451.3	453.2	438.0	425.5	422.7
42.5°	431.5	431.9	418.1	405.6	402.1
45°	402.7	400.8	387.4	373.9	368.3
47.5°	371.6	371.6	356.3	342.8	337.6
50°	350.2	350.2	334.9	321.5	317.8
52.5°	330.3	329.6	315.1	301.6	296.4
55°	300.6	299.6	285.3	271.9	268.1
57.5°	269.1	269.1	255.7	241.3	237.2
60°	250.0	250.0	236.6	222.2	216.6
62.5°	229.4	228.6	215.3	202.4	199.0
65°	200.4	198.5	186.1	174.6	171.8
67.5°	172.7	170.8	157.6	148.4	146.6
70°	153.6	151.8	139.3	131.6	129.8
72.5°	135.3	132.7	121.8	115.6	113.7
75°	108.8	105.0	96.4	92.5	91.6
77.5°	83.6	77.2	73.7	71.0	70.0
80°	66.8	61.2	59.2	57.2	56.3
82.5°	52.3	46.7	46.2	45.0	44.1
85°	31.5	27.8	27.7	26.7	25.8
87.5°	13.7	12.1	12.6	12.8	12.8
90°	3.8	6.7	9.6	10.6	10.6
92.5°	11.6	11.4	12.8	16.2	16.9
95°	23.3	33.0	18.5	20.5	23.4
97.5°	34.5	59.6	117.8	35.7	30.3
100°	43.9	73.6	232.9	69.0	46.0
102.5°	52.5	83.8	314.4	180.4	98.5
105°	65.5	96.1	356.3	453.6	299.6
107.5°	79.4	102.2	340.2	659.8	617.1
110°	88.0	110.0	330.8	693.2	744.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	97.4	119.4	321.4	673.7	759.7
115°	110.5	132.6	306.4	634.8	742.0
117.5°	125.0	146.7	302.9	593.8	704.1
120°	136.0	156.1	296.6	562.6	677.4
122.5°	143.1	165.5	288.8	535.7	641.4
125°	156.6	177.6	288.8	503.3	595.2
127.5°	167.0	189.2	289.2	465.7	556.4
130°	173.2	196.2	290.7	440.5	526.7
132.5°	180.3	203.3	290.0	429.2	500.0
135°	191.9	212.9	289.8	414.5	475.8
137.5°	201.7	224.3	289.8	398.2	450.7
140°	209.5	230.6	289.8	388.7	436.6
142.5°	217.3	236.9	291.3	377.7	422.5
145°	227.1	246.3	291.7	361.1	399.4
147.5°	238.9	255.7	294.1	349.2	378.7
150°	246.7	262.0	295.6	341.2	366.1
152.5°	254.5	268.3	295.6	334.9	355.2
155°	266.3	275.8	297.6	327.3	342.6
157.5°	275.7	284.9	299.9	322.5	333.6
160°	281.9	289.6	301.5	319.4	328.9
162.5°	286.6	294.3	303.1	317.7	324.2
165°	295.6	299.5	305.4	313.4	319.1
167.5°	300.7	304.2	307.4	311.4	314.8
170°	305.4	307.3	307.4	311.3	313.3
172.5°	307.0	310.4	309.0	309.8	311.7
175°	311.3	313.2	311.3	309.3	307.4
177.5°	311.3	312.8	311.3	311.3	309.7
180°	311.3	311.3	311.3	311.3	311.3

(END OF REPORT)