

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: P644919

Luminaire Tested: OMN4DIP-SR4F0-50D150U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644919
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-SR4F0-50D150U930-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

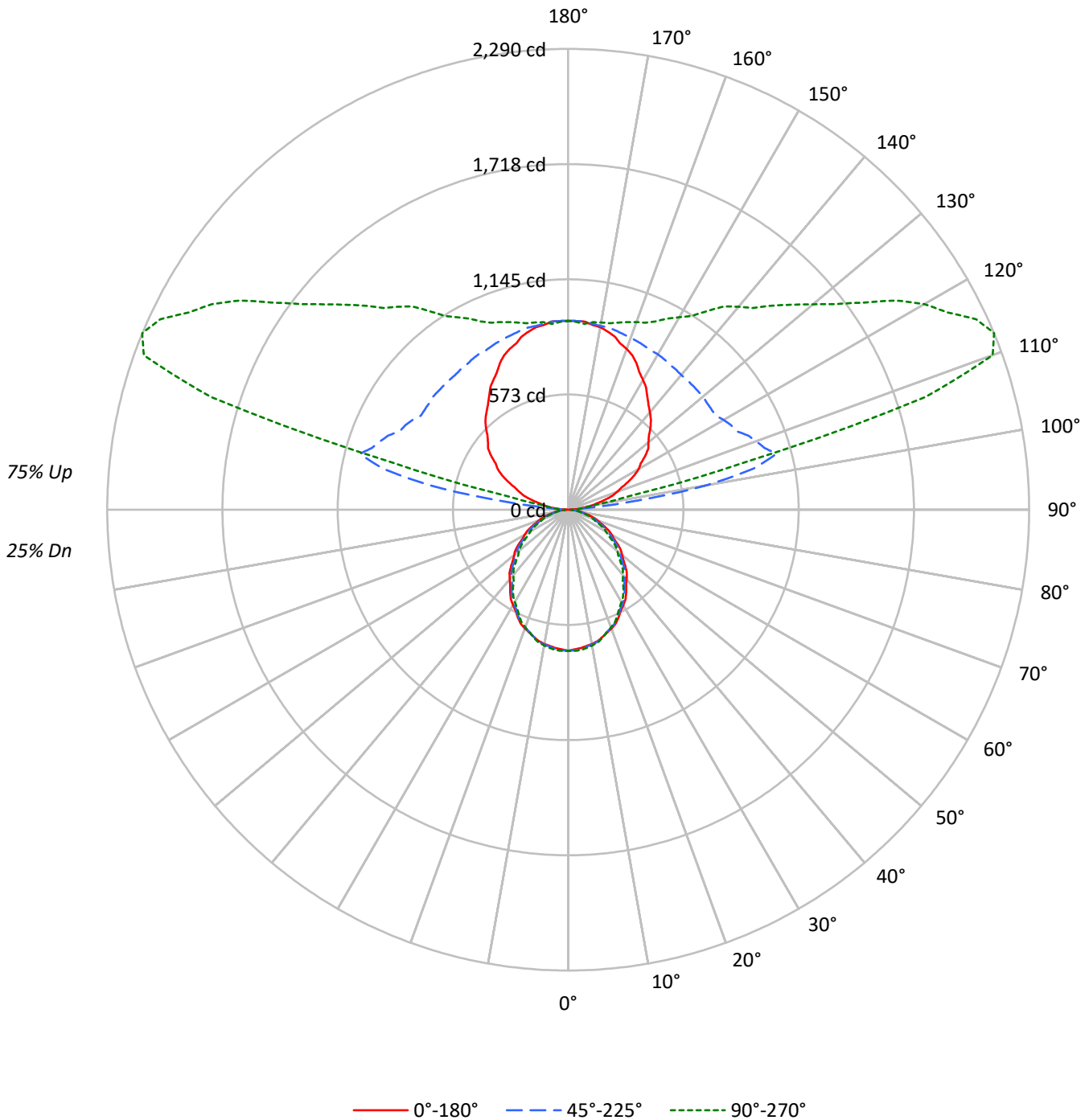
Lumens per Lamp: N/A
Luminaire Lumens: 6754.5 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 62.9
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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25
1	92	88	84	81	82	79	76	73	61	59	57	45	43	42	29	29	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	20	15
4	70	60	52	46	62	53	47	42	42	37	34	31	28	25	21	19	17	13
5	64	53	45	40	57	48	41	36	37	33	29	28	24	22	19	17	15	11
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	15	17	14	12	12	10	9	7

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	1.0
10°-20°	185.1	2.7
20°-30°	269.2	4.0
30°-40°	306.2	4.5
40°-50°	298.6	4.4
50°-60°	254.8	3.8
60°-70°	185.2	2.7
70°-80°	104.7	1.6
80°-90°	34.4	0.5
90°-100°	119.5	1.8
100°-110°	824.6	12.2
110°-120°	1117.7	16.5
120°-130°	909.4	13.5
130°-140°	730.9	10.8
140°-150°	576.1	8.5
150°-160°	421.3	6.2
160°-170°	261.7	3.9
170°-180°	89.2	1.3
0°-30°	520.3	7.7
0°-40°	826.5	12.2
0°-60°	1379.9	20.4
0°-90°	1704.2	25.2
90°-120°	2061.8	30.5
90°-150°	4278.1	63.3
90°-180°	5050.0	74.8
0°-180°	6754.5	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	10	18	22	22	6
95°	55	92	50	56	67	59
105°	188	284	1070	1366	903	198
115°	328	396	922	1914	2237	325
125°	468	532	869	1517	1794	416
135°	578	642	874	1250	1434	445
145°	685	742	880	1089	1204	430
155°	803	832	897	987	1033	369
165°	891	903	921	945	962	250
175°	939	944	939	932	927	89
180°	939	939	939	939	939	



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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	12.8	14.2	15.2	15.2
90°	3.8	10.5	17.5	22.5	22.5
92.5°	21.0	24.8	30.2	40.7	44.6
95°	54.9	91.5	50.1	56.2	66.8
97.5°	90.5	172.0	349.8	104.1	89.5
100°	118.8	214.2	698.4	206.0	136.7
102.5°	146.4	246.3	944.0	542.0	296.5
105°	187.8	284.0	1070.3	1365.8	903.1
107.5°	230.1	302.3	1021.9	1987.3	1860.6
110°	257.6	326.0	993.6	2088.2	2243.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.0	354.3	965.3	2029.2	2290.3
115°	327.5	395.8	921.8	1914.0	2237.2
117.5°	371.2	438.4	911.2	1790.2	2122.7
120°	404.3	466.8	892.3	1696.1	2042.4
122.5°	427.1	495.0	868.7	1615.2	1933.8
125°	468.2	531.7	868.7	1517.4	1794.5
127.5°	501.5	566.9	869.9	1404.0	1677.6
130°	520.4	589.7	874.6	1328.1	1587.9
132.5°	543.3	612.5	873.8	1294.0	1507.6
135°	578.5	642.0	873.6	1249.7	1434.4
137.5°	608.0	676.1	873.6	1200.7	1358.8
140°	631.6	695.1	873.6	1172.0	1316.3
142.5°	655.2	714.1	878.3	1138.8	1273.8
145°	684.7	742.4	879.5	1088.8	1204.2
147.5°	720.1	770.9	886.6	1052.7	1141.6
150°	743.8	789.9	891.3	1028.8	1103.8
152.5°	767.4	808.9	891.3	1009.6	1070.8
155°	802.8	831.6	897.2	986.8	1033.0
157.5°	831.1	858.8	904.3	972.4	1005.8
160°	850.0	873.1	909.0	962.8	991.7
162.5°	864.2	887.3	913.8	957.9	977.5
165°	891.3	902.9	920.8	944.9	962.2
167.5°	906.7	917.1	926.7	938.8	949.2
170°	920.8	926.6	926.7	938.7	944.5
172.5°	925.6	936.0	931.5	934.0	939.7
175°	938.6	944.3	938.6	932.5	926.7
177.5°	938.6	943.2	938.6	938.5	933.8
180°	938.6	938.6	938.6	938.6	938.6

(END OF REPORT)