

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: P644497

Luminaire Tested: OMN4DIP-SR4F0-100D100U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644497
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-100D100U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

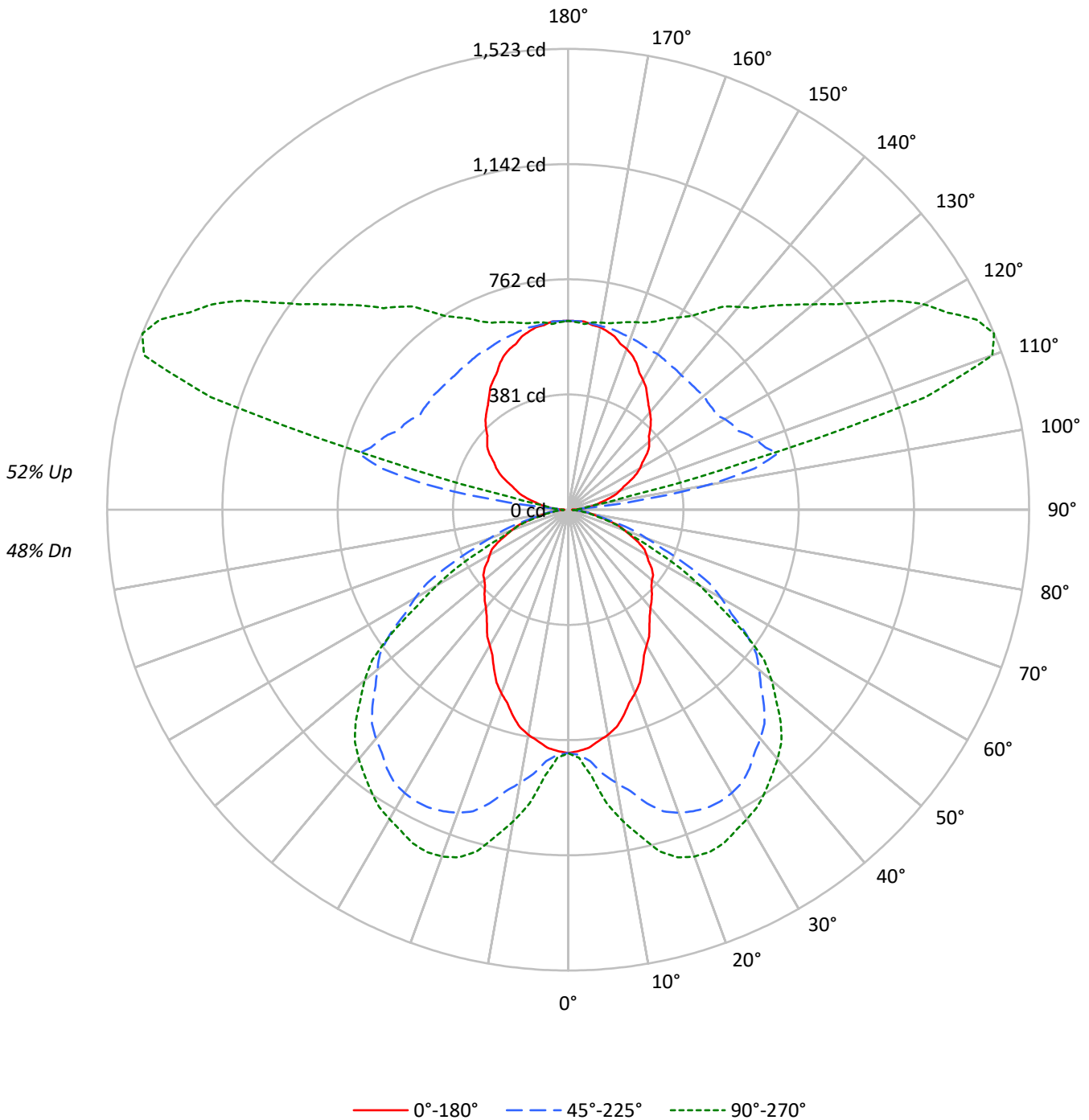
Lumens per Lamp: N/A
Luminaire Lumens: 6464.3 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.9
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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48				48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46				40	
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39				34	
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33				29	
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28				24	
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24				21	
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21				18	
7	57	45	37	31	53	42	35	30	36	30	26	30	25	22	24	21	19				16	
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17				14	
9	49	37	30	24	45	34	28	23	30	24	20	25	21	18	20	17	15				13	
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13				11	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12988	12988	12988
5°	12794	13522	14311
10°	12391	15028	17144
15°	11789	16792	19544
20°	11089	18321	20957
25°	10331	19363	21663
30°	9661	20159	22007
35°	9219	20576	22381
40°	8911	20818	22672
45°	8928	20888	22681
50°	9068	20675	22039
55°	9478	20273	20011
60°	9665	18849	16249
65°	9792	16508	11935
70°	9361	12982	9272
75°	8403	9688	7817
80°	7132	7652	6258
85°	6928	6243	5206

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 22681 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	1.3
10°-20°	274.2	4.2
20°-30°	455.5	7.0
30°-40°	574.6	8.9
40°-50°	614.2	9.5
50°-60°	542.1	8.4
60°-70°	347.9	5.4
70°-80°	154.3	2.4
80°-90°	41.4	0.6
90°-100°	87.2	1.3
100°-110°	553.4	8.6
110°-120°	747.2	11.6
120°-130°	607.3	9.4
130°-140°	486.2	7.5
140°-150°	383.0	5.9
150°-160°	280.1	4.3
160°-170°	173.9	2.7
170°-180°	59.3	0.9
0°-30°	812.1	12.6
0°-40°	1386.7	21.5
0°-60°	2543.1	39.3
0°-90°	3086.7	47.7
90°-120°	1387.9	21.5
90°-150°	2864.3	44.3
90°-180°	3378.0	52.3
0°-180°	6464.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	789	813	834	863	883	74
15°	705	813	1005	1125	1169	198
25°	580	787	1087	1188	1216	267
35°	468	718	1044	1112	1136	294
45°	391	614	915	971	993	302
55°	337	483	720	724	711	299
65°	256	324	432	351	312	251
75°	135	149	155	133	125	144
85°	37	32	34	30	28	40
90°	13	17	19	23	19	10
95°	52	72	41	41	47	50
105°	135	198	716	909	600	143
115°	225	269	618	1274	1487	224
125°	316	358	582	1011	1193	281
135°	385	427	581	831	954	296
145°	455	494	585	724	800	286
155°	534	553	596	656	687	245
165°	593	600	612	628	640	166
175°	624	628	624	620	616	59
180°	624	624	624	624	624	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	804.4	804.4	804.4	804.4	804.4
2.5°	798.4	810.1	810.4	815.0	820.9
5°	789.4	813.2	834.3	862.9	883.0
7.5°	770.7	813.2	880.7	947.0	979.9
10°	755.8	814.3	916.6	1005.5	1045.7
12.5°	736.3	813.9	952.6	1059.5	1105.6
15°	705.3	813.2	1004.6	1125.3	1169.2
17.5°	669.3	809.8	1045.4	1166.3	1204.7
20°	645.4	806.4	1066.3	1181.3	1219.7
22.5°	618.5	798.4	1078.3	1188.7	1224.2
25°	579.9	786.6	1086.9	1188.5	1216.0
27.5°	542.1	769.7	1087.3	1173.5	1196.9
30°	518.2	756.0	1081.3	1158.5	1180.4
32.5°	497.2	740.9	1069.3	1140.5	1164.0
35°	467.7	718.3	1043.9	1111.7	1135.5
37.5°	442.2	692.5	1011.7	1077.8	1105.6
40°	422.8	671.5	987.7	1053.7	1075.7
42.5°	407.8	649.3	959.3	1023.7	1042.7
45°	391.0	614.1	914.8	971.4	993.3
47.5°	373.0	577.9	863.5	917.0	931.2
50°	361.0	551.3	823.1	871.9	877.4
52.5°	353.6	523.3	784.2	814.9	816.0
55°	336.7	483.1	720.2	723.7	710.9
57.5°	314.3	436.1	639.0	620.8	590.0
60°	299.3	403.6	583.7	547.1	503.2
62.5°	284.3	372.5	525.3	466.1	414.9
65°	256.3	324.0	432.1	350.8	312.4
67.5°	223.7	270.6	339.3	262.4	236.8
70°	198.3	234.9	275.0	214.7	196.4
72.5°	174.3	199.2	222.6	177.5	168.0
75°	134.7	149.3	155.3	132.7	125.3
77.5°	99.1	99.9	107.8	93.5	89.8
80°	76.7	73.0	82.3	71.0	67.3
82.5°	58.7	53.6	59.9	51.6	49.4
85°	37.4	31.9	33.7	29.9	28.1
87.5°	22.1	18.5	18.8	18.0	15.8
90°	13.1	16.9	19.1	22.9	19.3
92.5°	27.0	26.4	27.0	32.5	32.0
95°	52.0	71.5	40.7	41.1	46.9
97.5°	74.1	124.6	237.9	71.8	60.7
100°	91.4	151.1	468.7	140.0	92.1
102.5°	108.7	173.0	631.9	361.9	197.4
105°	134.7	198.1	715.9	909.2	600.4
107.5°	162.6	208.4	683.7	1322.4	1236.9
110°	180.0	224.2	664.9	1389.4	1491.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	198.8	243.0	646.0	1350.2	1522.6
115°	225.2	269.4	617.8	1274.2	1487.3
117.5°	253.9	297.7	610.7	1192.0	1411.2
120°	274.3	316.5	598.2	1129.4	1357.8
122.5°	290.0	333.8	581.0	1075.6	1285.6
125°	315.6	357.8	582.5	1010.6	1193.0
127.5°	336.5	381.0	581.4	934.9	1115.3
130°	349.1	395.1	584.5	883.0	1055.6
132.5°	361.8	407.8	581.5	860.3	1002.2
135°	384.6	426.8	580.8	830.8	953.6
137.5°	404.2	449.5	580.8	798.2	903.4
140°	419.9	462.1	580.8	779.2	875.1
142.5°	435.6	474.7	583.9	757.1	846.8
145°	455.2	493.6	584.7	723.8	800.5
147.5°	478.8	512.5	589.4	699.9	758.9
150°	494.5	525.1	592.6	683.9	733.8
152.5°	510.1	537.8	592.6	671.2	711.9
155°	533.7	552.9	596.5	656.0	686.7
157.5°	552.5	570.9	601.2	646.4	668.7
160°	565.1	580.4	604.3	640.1	659.3
162.5°	574.5	589.9	607.5	636.8	649.9
165°	592.6	600.2	612.2	628.1	639.6
167.5°	602.8	609.7	616.1	624.1	631.0
170°	612.2	616.0	616.1	624.0	627.9
172.5°	615.3	622.2	619.2	620.9	624.7
175°	624.0	627.8	624.0	619.9	616.1
177.5°	624.0	627.0	624.0	623.9	620.8
180°	624.0	624.0	624.0	624.0	624.0

(END OF REPORT)