

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: P645039

Luminaire Tested: OMN4DIP-SR4F0-75D100U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645039  
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-SR4F0-75D100U930-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

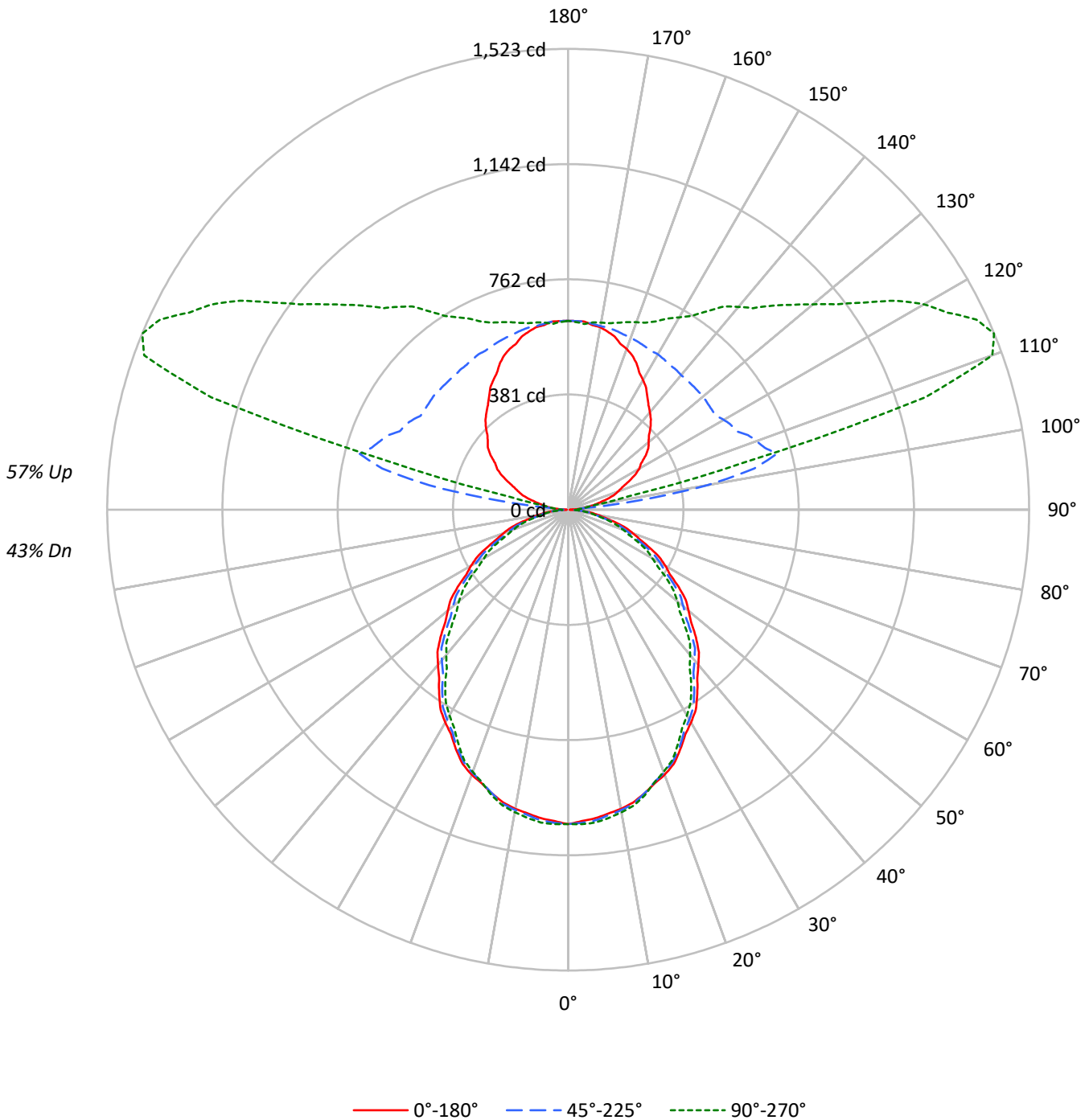
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5888.0 lumens  
Efficiency: N/A  
Efficacy: 115.9 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): 50.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P645039

CATALOG NUMBER: OMN4DIP-SR4F0-75D100U930-FLLOOB-1DUDD-WW

### Luminous Intensity Polar Plot





TEST NUMBER: P645039

CATALOG NUMBER: OMN4DIP-SR4F0-75D100U930-FLLOOB-1DUDD-WW

**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	96	96	96	96	79	79	79	64	64	64	50	50	50	43
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36
2	88	80	74	69	80	74	68	64	61	57	54	49	47	45	39	37	35	30
3	80	71	64	58	73	65	59	54	54	49	46	44	41	38	34	32	30	26
4	73	63	55	49	67	58	51	46	48	43	39	39	35	32	31	28	26	22
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	25	22	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	14
9	49	37	30	25	45	35	28	24	29	24	20	24	20	18	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	22	19	16	18	15	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	16779	16779	16779
5°	16592	16705	16820
10°	16459	16528	16644
15°	16236	16236	16331
20°	16010	15888	15840
25°	15592	15465	15264
30°	15131	14920	14630
35°	14659	14296	13963
40°	14096	13679	13203
45°	13625	13107	12463
50°	13034	12466	11826
55°	12538	11902	11184
60°	11961	11321	10366
65°	11343	10533	9723
70°	10744	9744	9078
75°	10056	8908	8465
80°	9205	8154	7755
85°	8651	7595	7077

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13625 cd/sqm



TEST NUMBER: P645039

CATALOG NUMBER: OMN4DIP-SR4F0-75D100U930-FLLOOB-1DUDD-WW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.8	1.7
10°-20°	274.3	4.7
20°-30°	398.9	6.8
30°-40°	453.7	7.7
40°-50°	442.4	7.5
50°-60°	377.6	6.4
60°-70°	274.4	4.7
70°-80°	155.2	2.6
80°-90°	49.2	0.8
90°-100°	82.7	1.4
100°-110°	550.0	9.3
110°-120°	744.2	12.6
120°-130°	605.2	10.3
130°-140°	486.0	8.3
140°-150°	383.0	6.5
150°-160°	280.1	4.8
160°-170°	173.9	3.0
170°-180°	59.3	1.0
0°-30°	771.0	13.1
0°-40°	1224.7	20.8
0°-60°	2044.7	34.7
0°-90°	2523.5	42.9
90°-120°	1377.0	23.4
90°-150°	2851.2	48.4
90°-180°	3364.0	57.1
0°-180°	5888.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1039	1039	1039	1039	1039	
5°	1024	1039	1031	1030	1038	97
15°	971	984	971	970	977	274
25°	875	884	868	853	857	403
35°	744	746	725	708	708	464
45°	597	594	574	554	546	459
55°	445	444	423	403	397	397
65°	297	294	276	259	254	295
75°	161	156	143	137	136	171
85°	47	41	41	40	38	50
90°	6	11	16	19	19	7
95°	43	64	36	40	46	44
105°	129	191	713	909	600	136
115°	220	265	614	1272	1487	219
125°	313	355	578	1009	1193	278
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	

TEST NUMBER: P645039

CATALOG NUMBER: OMN4DIP-SR4F0-75D100U930-FLLOOB-1DUDD-WW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1030.2	1043.4	1035.8	1035.9	1040.3
5°	1023.7	1038.9	1030.7	1029.5	1037.8
7.5°	1012.9	1027.8	1018.3	1016.8	1027.6
10°	1003.9	1017.7	1008.1	1005.5	1015.2
12.5°	991.4	1005.3	995.7	991.9	1001.6
15°	971.3	983.8	971.3	970.1	977.0
17.5°	948.7	959.5	945.1	940.4	945.6
20°	931.8	941.4	924.7	917.7	921.9
22.5°	910.3	919.9	902.1	891.7	897.0
25°	875.2	883.5	868.1	852.7	856.8
27.5°	837.6	844.0	828.5	812.7	814.1
30°	811.6	815.7	800.3	783.3	784.7
32.5°	784.4	787.5	770.9	752.8	753.0
35°	743.7	746.5	725.3	708.4	708.4
37.5°	700.4	702.1	679.5	661.1	659.2
40°	668.8	671.5	649.0	630.5	626.4
42.5°	639.4	639.9	619.6	601.1	595.8
45°	596.7	593.9	574.0	554.1	545.8
47.5°	550.6	550.6	528.0	508.0	500.2
50°	518.9	518.9	496.3	476.4	470.8
52.5°	489.5	488.4	466.9	446.9	439.2
55°	445.4	444.0	422.8	402.8	397.3
57.5°	398.7	398.7	378.9	357.6	351.5
60°	370.4	370.4	350.6	329.3	321.0
62.5°	339.9	338.8	319.0	299.9	294.9
65°	296.9	294.2	275.7	258.6	254.5
67.5°	255.9	253.2	233.6	219.9	217.2
70°	227.6	224.9	206.4	195.1	192.3
72.5°	200.5	196.6	180.4	171.3	168.5
75°	161.2	155.7	142.8	137.1	135.7
77.5°	123.9	114.5	109.2	105.2	103.8
80°	99.0	90.7	87.7	84.8	83.4
82.5°	77.5	69.2	68.4	66.7	65.3
85°	46.7	41.1	41.0	39.6	38.2
87.5°	20.4	18.1	19.1	19.6	19.6
90°	5.7	10.9	16.3	18.8	18.8
92.5°	19.6	20.4	23.5	30.3	32.3
95°	42.7	64.0	35.6	39.7	46.0
97.5°	65.6	117.5	234.7	70.6	60.3
100°	84.5	145.5	465.9	137.7	91.7
102.5°	102.2	166.3	629.1	361.1	197.3
105°	128.7	191.2	713.1	908.8	600.4
107.5°	156.7	203.3	680.9	1321.9	1236.9
110°	174.4	219.1	662.1	1389.0	1491.2



TEST NUMBER: P645039

CATALOG NUMBER: OMN4DIP-SR4F0-75D100U930-FLLOOB-1DUDD-WW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	193.2	237.9	643.3	1349.8	1522.6
115°	220.1	264.7	613.6	1272.4	1487.3
117.5°	249.1	293.0	606.5	1190.1	1411.2
120°	271.1	311.9	594.0	1127.6	1357.8
122.5°	285.7	330.7	578.3	1073.8	1285.6
125°	312.8	355.0	578.3	1008.8	1193.0
127.5°	334.2	378.3	579.1	933.4	1115.3
130°	346.7	392.8	582.2	883.0	1055.6
132.5°	361.3	407.4	581.1	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)