

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: P645189

Luminaire Tested: OMN4DIP-SR4F0-75D75U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645189  
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-SR4F0-75D75U930-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

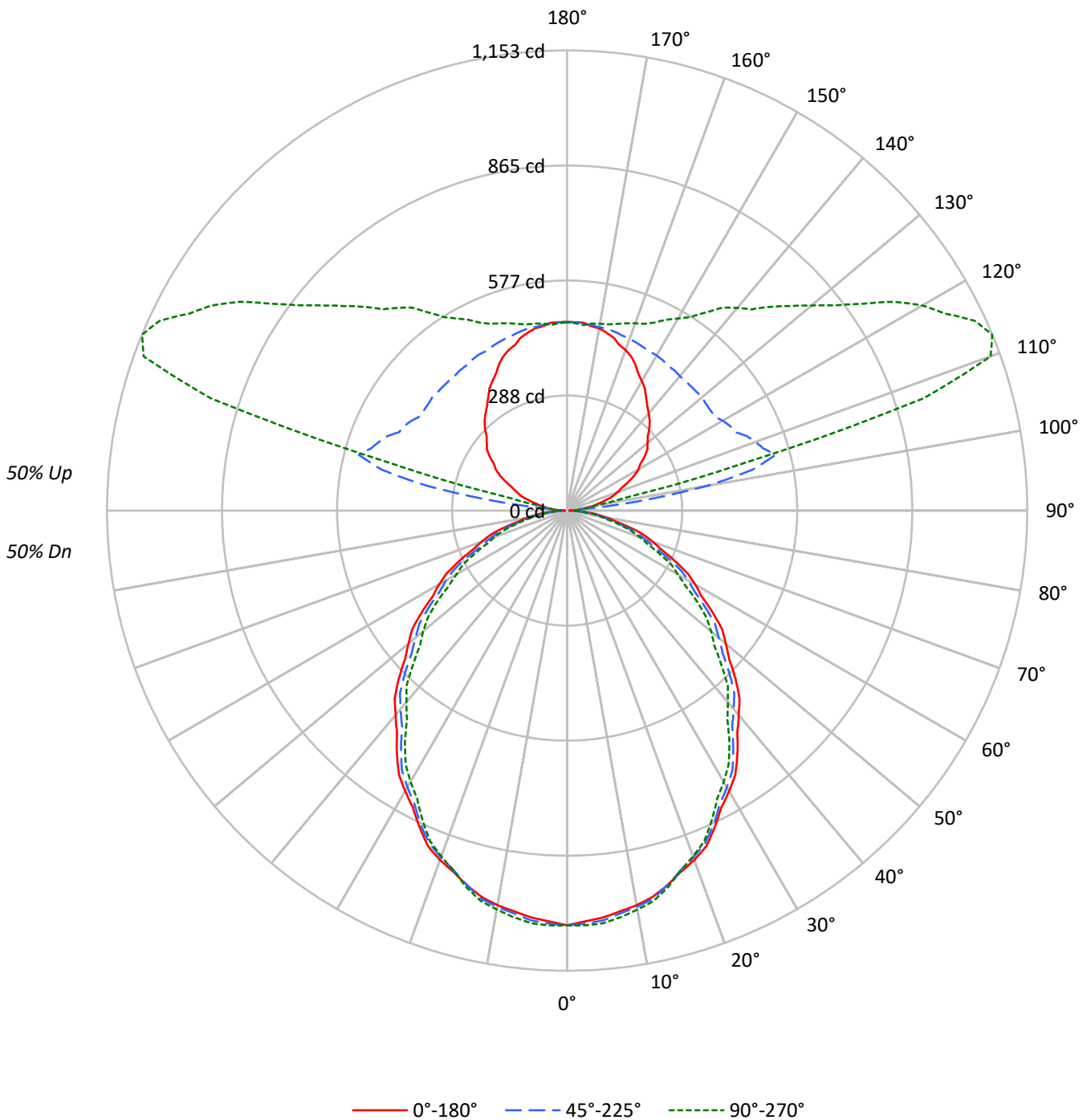
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5073.7 lumens  
Efficiency: N/A  
Efficacy: 119.1 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): 42.6  
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

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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	83	83	83	69	69	69	56	56	56	50				
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	49	48	47	42				
2	89	82	76	70	82	76	70	66	64	60	57	53	51	48	44	42	40	35				
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	39	36	34	30				
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	30	26				
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	31	28	26	23				
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16				
9	50	38	31	26	47	36	29	24	31	26	22	26	22	19	22	19	16	14				
10	47	35	28	23	44	33	26	22	29	23	20	24	20	17	21	17	15	13				

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.8	1.9
10°-20°	274.3	5.4
20°-30°	398.9	7.9
30°-40°	453.7	8.9
40°-50°	442.4	8.7
50°-60°	377.6	7.4
60°-70°	274.4	5.4
70°-80°	155.2	3.1
80°-90°	48.8	1.0
90°-100°	64.1	1.3
100°-110°	417.3	8.2
110°-120°	564.0	11.1
120°-130°	458.5	9.0
130°-140°	368.0	7.3
140°-150°	290.0	5.7
150°-160°	212.0	4.2
160°-170°	131.7	2.6
170°-180°	44.9	0.9
0°-30°	771.0	15.2
0°-40°	1224.7	24.1
0°-60°	2044.7	40.3
0°-90°	2523.2	49.7
90°-120°	1045.3	20.6
90°-150°	2161.8	42.6
90°-180°	2550.0	50.3
0°-180°	5073.7	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	10	14	16	16	7
95°	35	50	28	31	36	35
105°	99	146	541	688	455	105
115°	168	201	465	963	1126	167
125°	238	270	438	764	903	211
135°	291	323	440	629	722	224
145°	345	374	443	548	606	216
155°	404	419	452	497	520	186
165°	449	454	464	476	484	126
175°	472	475	472	469	466	45
180°	472	472	472	472	472	

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**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	17.9	18.7	19.0	19.0
90°	5.7	9.9	14.4	16.0	16.0
92.5°	17.3	17.2	19.3	24.4	25.6
95°	35.1	49.9	28.0	31.1	35.5
97.5°	52.1	90.4	178.7	54.1	46.0
100°	66.4	111.6	353.4	104.6	69.8
102.5°	79.5	127.0	477.0	273.7	149.4
105°	99.2	145.8	540.6	688.4	454.6
107.5°	120.3	155.0	516.3	1001.2	936.5
110°	133.4	166.9	502.0	1052.0	1129.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	147.7	181.2	487.7	1022.3	1152.8
115°	167.7	201.1	464.9	963.4	1126.1
117.5°	189.6	222.5	459.6	901.1	1068.4
120°	206.3	236.9	450.1	853.7	1028.0
122.5°	217.0	251.0	438.2	813.0	973.4
125°	237.6	269.5	438.2	763.8	903.2
127.5°	253.4	287.0	438.8	706.7	844.4
130°	262.9	297.7	441.2	668.5	799.3
132.5°	273.6	308.5	440.0	651.4	758.8
135°	291.2	323.1	439.7	629.0	722.0
137.5°	306.0	340.3	439.7	604.4	684.0
140°	317.9	349.9	439.7	589.9	662.6
142.5°	329.8	359.4	442.1	573.2	641.2
145°	344.7	373.7	442.7	548.0	606.1
147.5°	362.5	388.1	446.3	529.9	574.6
150°	374.4	397.6	448.7	517.8	555.6
152.5°	386.3	407.2	448.7	508.2	539.0
155°	404.1	418.6	451.6	496.7	520.0
157.5°	418.3	432.3	455.2	489.4	506.3
160°	427.9	439.5	457.6	484.6	499.2
162.5°	435.0	446.6	459.9	482.2	492.0
165°	448.7	454.5	463.5	475.6	484.3
167.5°	456.4	461.6	466.5	472.5	477.8
170°	463.5	466.4	466.5	472.5	475.4
172.5°	465.9	471.1	468.9	470.1	473.0
175°	472.4	475.3	472.4	469.4	466.5
177.5°	472.4	474.7	472.4	472.4	470.0
180°	472.4	472.4	472.4	472.4	472.4

(END OF REPORT)