

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: P645079

Luminaire Tested: OMN4DIP-SR4F0-75D125U940-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645079  
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-SR4F0-75D125U940-CLBOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

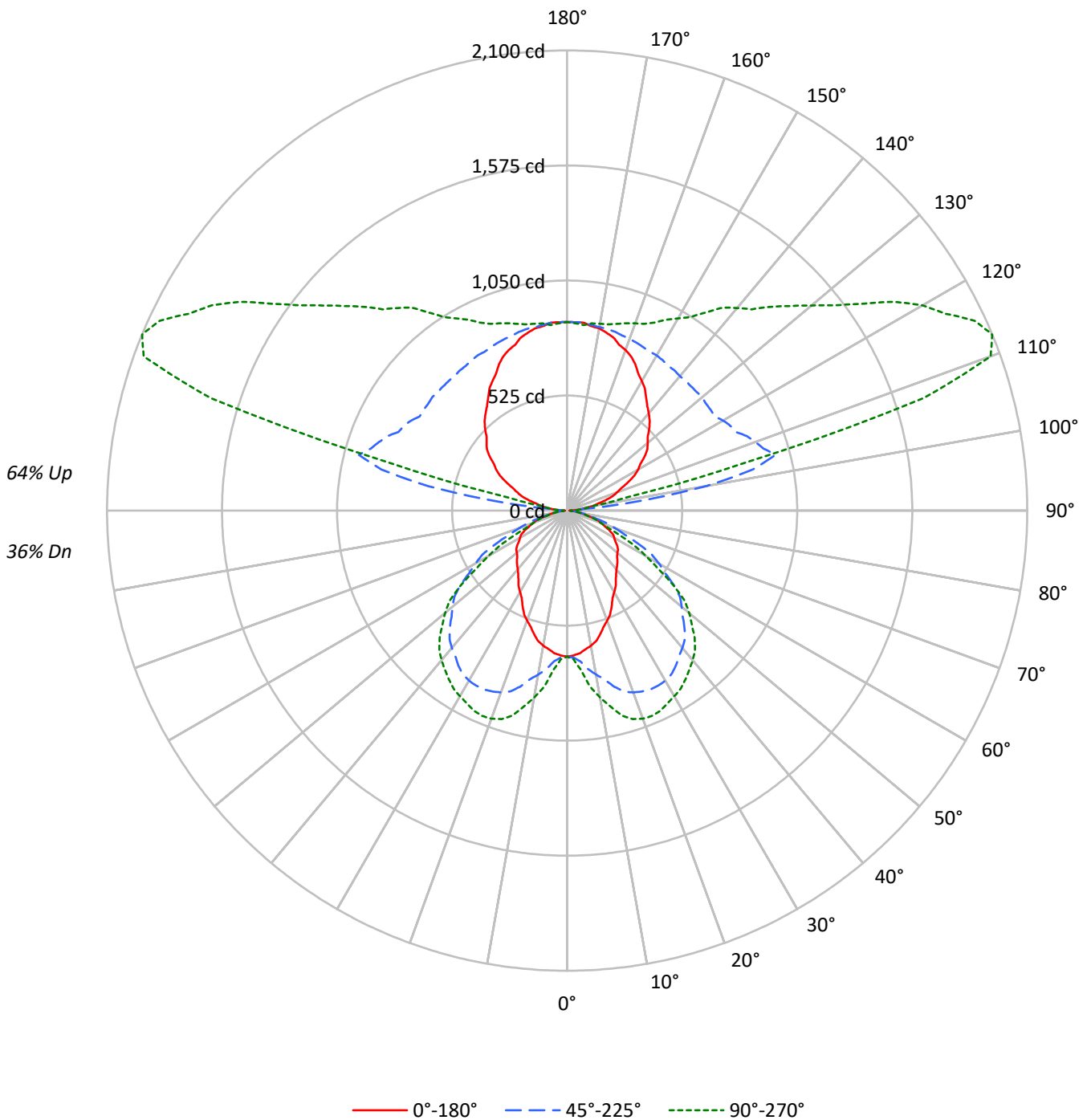
Lumens per Lamp: N/A  
Luminaire Lumens: 7201.3 lumens  
Efficiency: N/A  
Efficacy: 120.0 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 60  
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	36
1	95	90	87	83	85	82	79	76	66	64	62	51	50	49	38	37	36	30
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	33	32	31	25
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	29	28	26	21
4	72	61	53	47	65	56	49	44	45	40	36	35	32	29	26	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	23	21	19	16
6	60	48	40	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	56	44	36	30	50	40	33	28	32	27	23	26	22	19	19	17	15	12
8	51	39	32	27	46	36	29	25	29	24	21	23	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	21	18	15	16	14	12	9
10	44	33	26	21	40	30	24	19	25	20	16	20	16	13	15	12	11	8

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

	0°	45°	90°
0°	10760	10760	10760
5°	10600	11203	11856
10°	10265	12449	14203
15°	9765	13911	16191
20°	9186	15177	17361
25°	8558	16041	17945
30°	8004	16699	18232
35°	7636	17044	18542
40°	7381	17245	18782
45°	7396	17303	18790
50°	7513	17128	18256
55°	7851	16794	16577
60°	8005	15613	13462
65°	8111	13677	9887
70°	7756	10754	7681
75°	6962	8022	6475
80°	5904	6341	5188
85°	5743	5169	4298

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 18790 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.3	0.9
10°-20°	227.1	3.2
20°-30°	377.3	5.2
30°-40°	476.0	6.6
40°-50°	508.8	7.1
50°-60°	449.1	6.2
60°-70°	288.2	4.0
70°-80°	127.8	1.8
80°-90°	35.1	0.5
90°-100°	114.5	1.6
100°-110°	759.4	10.5
110°-120°	1027.7	14.3
120°-130°	835.7	11.6
130°-140°	670.2	9.3
140°-150°	528.2	7.3
150°-160°	386.2	5.4
160°-170°	239.9	3.3
170°-180°	81.8	1.1
0°-30°	672.8	9.3
0°-40°	1148.7	16.0
0°-60°	2106.6	29.3
0°-90°	2557.7	35.5
90°-120°	1901.6	26.4
90°-150°	3935.7	54.7
90°-180°	4644.0	64.5
0°-180°	7201.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	654	674	691	715	732	61
15°	584	674	832	932	969	164
25°	480	652	900	985	1007	221
35°	387	595	865	921	941	243
45°	324	509	758	805	823	250
55°	279	400	597	600	589	247
65°	212	268	358	291	259	208
75°	112	124	129	110	104	119
85°	31	26	28	25	23	33
90°	11	16	20	26	22	9
95°	60	91	51	54	63	61
105°	179	267	984	1253	828	189
115°	305	367	849	1756	2051	303
125°	432	490	800	1393	1645	384
135°	530	588	801	1146	1315	408
145°	628	681	806	998	1104	394
155°	736	762	823	905	947	338
165°	817	828	844	866	882	229
175°	860	866	860	855	850	81
180°	860	860	860	860	860	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	666.4	666.4	666.4	666.4	666.4
2.5°	661.4	671.1	671.3	675.2	680.0
5°	654.0	673.7	691.2	714.8	731.5
7.5°	638.5	673.6	729.6	784.5	811.7
10°	626.1	674.6	759.3	832.9	866.3
12.5°	610.0	674.2	789.1	877.7	915.9
15°	584.2	673.6	832.2	932.2	968.6
17.5°	554.5	670.8	866.0	966.2	998.0
20°	534.6	668.0	883.3	978.6	1010.4
22.5°	512.3	661.4	893.2	984.7	1014.1
25°	480.4	651.6	900.4	984.6	1007.3
27.5°	449.1	637.6	900.7	972.1	991.5
30°	429.3	626.2	895.7	959.7	977.9
32.5°	411.9	613.7	885.8	944.8	964.2
35°	387.4	595.0	864.7	921.0	940.7
37.5°	366.3	573.6	838.1	892.8	915.9
40°	350.2	556.3	818.2	872.9	891.1
42.5°	337.8	537.8	794.7	848.0	863.8
45°	323.9	508.7	757.8	804.7	822.9
47.5°	309.0	478.7	715.3	759.6	771.4
50°	299.1	456.7	681.9	722.3	726.8
52.5°	292.9	433.5	649.6	675.1	676.0
55°	278.9	400.2	596.6	599.5	588.9
57.5°	260.3	361.3	529.4	514.2	488.8
60°	247.9	334.3	483.5	453.2	416.9
62.5°	235.6	308.6	435.2	386.1	343.7
65°	212.3	268.4	358.0	290.6	258.8
67.5°	185.3	224.1	281.1	217.4	196.2
70°	164.3	194.6	227.8	177.9	162.7
72.5°	144.4	165.0	184.4	147.0	139.2
75°	111.6	123.7	128.6	109.9	103.8
77.5°	82.1	82.7	89.3	77.4	74.4
80°	63.5	60.5	68.2	58.8	55.8
82.5°	48.7	44.4	49.6	42.7	40.9
85°	31.0	26.4	27.9	24.8	23.2
87.5°	18.3	15.7	16.4	16.2	14.4
90°	10.8	16.1	20.1	25.5	22.4
92.5°	27.6	29.2	31.9	40.4	41.6
95°	60.3	91.3	51.0	53.6	62.6
97.5°	92.0	164.7	324.1	96.9	82.7
100°	116.8	202.2	643.2	191.0	126.0
102.5°	141.5	232.4	868.3	497.8	272.0
105°	178.6	267.0	984.2	1252.8	828.0
107.5°	217.3	282.3	939.8	1822.6	1705.8
110°	242.0	304.0	913.8	1915.1	2056.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	268.0	330.0	887.8	1861.0	2099.7
115°	305.4	367.4	848.9	1756.2	2051.0
117.5°	345.1	406.4	839.1	1642.8	1946.0
120°	374.2	432.4	821.8	1556.5	1872.4
122.5°	395.8	457.1	798.9	1482.3	1772.9
125°	432.2	490.4	800.2	1392.7	1645.1
127.5°	462.0	522.5	799.7	1288.4	1538.0
130°	479.3	542.8	804.0	1217.6	1455.7
132.5°	498.5	562.0	801.5	1186.4	1382.1
135°	530.3	588.5	800.9	1145.7	1315.0
137.5°	557.4	619.8	800.9	1100.8	1245.8
140°	579.0	637.3	800.9	1074.5	1206.8
142.5°	600.7	654.7	805.3	1044.0	1167.8
145°	627.8	680.7	806.3	998.1	1104.0
147.5°	660.2	706.8	812.8	965.1	1046.6
150°	681.9	724.2	817.2	943.2	1012.0
152.5°	703.5	741.6	817.2	925.6	981.7
155°	736.0	762.4	822.6	904.7	947.0
157.5°	762.0	787.4	829.1	891.5	922.1
160°	779.3	800.4	833.4	882.7	909.2
162.5°	792.3	813.4	837.7	878.2	896.2
165°	817.2	827.7	844.2	866.2	882.1
167.5°	831.2	840.8	849.6	860.7	870.2
170°	844.2	849.5	849.6	860.6	865.9
172.5°	848.5	858.1	854.0	856.2	861.5
175°	860.5	865.7	860.5	854.9	849.6
177.5°	860.5	864.7	860.5	860.4	856.1
180°	860.5	860.5	860.5	860.5	860.5

(END OF REPORT)