

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: P645075

Luminaire Tested: OMN4DIP-SR4F0-75D125U935-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645075  
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-SR4F0-75D125U935-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

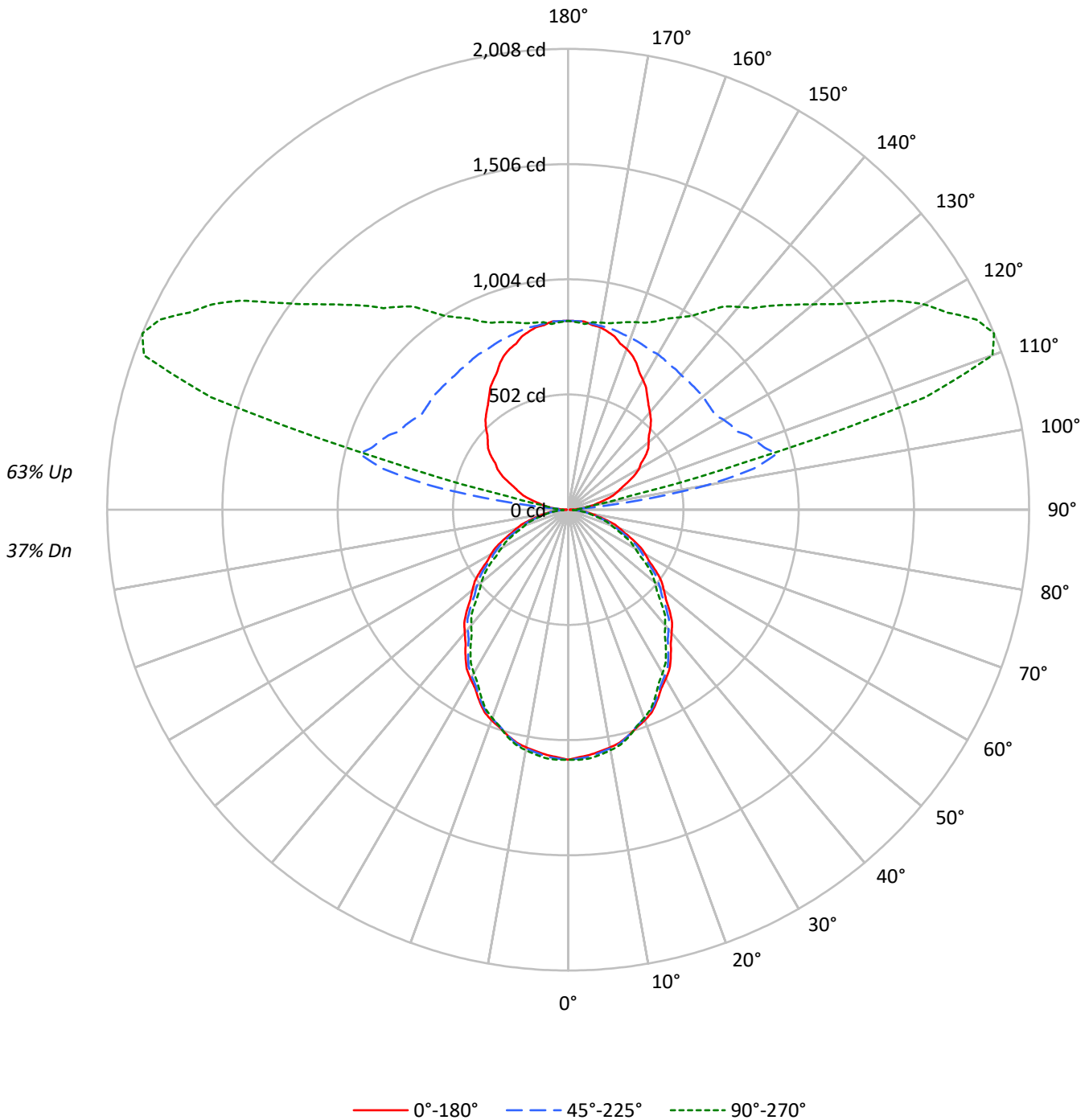
Lumens per Lamp: N/A  
Luminaire Lumens: 7077.8 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 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	76	76	76		60	60	60		45	45	45	37
1	95	91	87	84	86	82	79	76	67	65	63		53	51	50		39	38	38	32
2	87	79	73	68	78	72	67	63	59	55	52		46	44	42		35	33	32	27
3	79	70	63	57	71	64	57	52	52	47	44		41	38	35		31	29	27	23
4	72	62	54	48	65	56	50	44	46	41	37		36	33	30		28	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32		33	29	26		25	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28		30	26	23		23	20	18	15
7	56	44	37	31	51	41	34	29	34	28	25		27	23	20		21	18	16	13
8	52	40	33	28	47	37	30	26	31	25	22		25	21	18		19	16	14	12
9	49	37	29	24	44	34	27	23	28	23	19		23	19	16		18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18		21	17	15		16	14	12	10

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

	0°	45°	90°
0°	17584	17584	17584
5°	17387	17507	17627
10°	17247	17321	17443
15°	17016	17016	17115
20°	16778	16651	16600
25°	16340	16208	15996
30°	15856	15636	15333
35°	15362	14982	14633
40°	14773	14334	13835
45°	14278	13737	13061
50°	13659	13064	12393
55°	13140	12470	11721
60°	12536	11867	10863
65°	11889	11037	10189
70°	11264	10211	9512
75°	10536	9339	8871
80°	9642	8545	8126
85°	9059	7966	7410

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14278 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.4	1.4
10°-20°	287.5	4.1
20°-30°	418.0	5.9
30°-40°	475.5	6.7
40°-50°	463.6	6.6
50°-60°	395.7	5.6
60°-70°	287.6	4.1
70°-80°	162.6	2.3
80°-90°	51.9	0.7
90°-100°	107.5	1.5
100°-110°	724.3	10.2
110°-120°	980.7	13.9
120°-130°	797.7	11.3
130°-140°	640.7	9.1
140°-150°	505.0	7.1
150°-160°	369.3	5.2
160°-170°	229.4	3.2
170°-180°	78.2	1.1
0°-30°	808.0	11.4
0°-40°	1283.5	18.1
0°-60°	2142.8	30.3
0°-90°	2645.0	37.4
90°-120°	1812.5	25.6
90°-150°	3756.0	53.1
90°-180°	4433.0	62.6
0°-180°	7077.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1073	1089	1080	1079	1088	102
15°	1018	1031	1018	1017	1024	287
25°	917	926	910	894	898	422
35°	779	782	760	742	742	487
45°	625	622	602	581	572	481
55°	467	465	443	422	416	417
65°	311	308	289	271	267	309
75°	169	163	150	144	142	179
85°	49	43	43	42	40	52
90°	6	12	19	23	23	8
95°	53	83	46	51	60	55
105°	168	251	940	1198	792	178
115°	289	348	809	1678	1961	287
125°	412	467	762	1330	1573	366
135°	507	563	766	1096	1257	390
145°	600	651	771	954	1056	377
155°	704	729	786	865	906	323
165°	781	792	807	828	843	219
175°	823	828	823	817	812	78
180°	823	823	823	823	823	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1089.1	1089.1	1089.1	1089.1	1089.1
2.5°	1079.6	1093.5	1085.5	1085.6	1090.3
5°	1072.8	1088.7	1080.2	1078.9	1087.6
7.5°	1061.5	1077.2	1067.2	1065.6	1076.9
10°	1052.0	1066.5	1056.5	1053.8	1063.9
12.5°	1039.0	1053.5	1043.5	1039.5	1049.7
15°	1018.0	1031.0	1018.0	1016.6	1023.9
17.5°	994.3	1005.6	990.4	985.5	991.0
20°	976.5	986.6	969.1	961.8	966.1
22.5°	954.0	964.1	945.4	934.5	940.0
25°	917.2	925.9	909.8	893.6	897.9
27.5°	877.8	884.5	868.3	851.7	853.2
30°	850.5	854.9	838.7	820.9	822.4
32.5°	822.1	825.3	807.9	788.9	789.2
35°	779.4	782.3	760.1	742.4	742.4
37.5°	734.1	735.8	712.1	692.8	690.8
40°	700.9	703.8	680.1	660.8	656.4
42.5°	670.0	670.6	649.3	629.9	624.4
45°	625.3	622.4	601.6	580.6	572.0
47.5°	577.0	577.0	553.3	532.4	524.2
50°	543.8	543.8	520.1	499.2	493.4
52.5°	513.0	511.8	489.3	468.3	460.2
55°	466.8	465.3	443.0	422.2	416.4
57.5°	417.9	417.9	397.1	374.7	368.4
60°	388.2	388.2	367.5	345.1	336.4
62.5°	356.2	355.1	334.3	314.3	309.1
65°	311.2	308.3	288.9	271.1	266.7
67.5°	268.2	265.3	244.8	230.5	227.6
70°	238.6	235.7	216.3	204.4	201.5
72.5°	210.1	206.1	189.1	179.5	176.6
75°	168.9	163.1	149.7	143.7	142.2
77.5°	129.8	119.9	114.4	110.2	108.8
80°	103.7	95.0	91.9	88.9	87.4
82.5°	81.2	72.5	71.7	69.9	68.5
85°	48.9	43.1	43.0	41.5	40.0
87.5°	21.3	19.2	20.4	21.2	21.2
90°	5.9	12.4	19.2	22.9	22.9
92.5°	23.1	25.0	29.3	38.4	41.3
95°	53.2	82.9	45.8	51.2	59.9
97.5°	83.8	153.4	308.4	92.4	79.1
100°	108.7	190.3	613.5	181.2	120.5
102.5°	132.3	218.0	828.8	475.7	260.1
105°	167.8	250.9	939.5	1197.9	791.7
107.5°	204.8	266.9	897.1	1742.7	1631.0
110°	228.4	287.7	872.3	1831.1	1966.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	253.3	312.5	847.4	1779.4	2007.7
115°	289.0	348.3	808.7	1677.8	1961.1
117.5°	327.3	385.6	799.4	1569.3	1860.7
120°	356.3	410.5	782.8	1486.8	1790.3
122.5°	375.8	435.2	762.1	1415.9	1695.1
125°	411.7	467.4	762.1	1330.2	1573.0
127.5°	440.3	498.1	763.2	1230.8	1470.6
130°	456.8	517.5	767.3	1164.2	1391.9
132.5°	476.3	537.1	766.1	1134.3	1321.5
135°	507.1	562.7	765.8	1095.5	1257.4
137.5°	533.0	592.7	765.8	1052.5	1191.1
140°	553.7	609.3	765.8	1027.4	1153.9
142.5°	574.4	626.0	770.0	998.2	1116.6
145°	600.2	650.8	771.0	954.4	1055.6
147.5°	631.3	675.8	777.2	922.8	1000.7
150°	652.0	692.5	781.3	901.8	967.6
152.5°	672.7	709.1	781.3	885.0	938.6
155°	703.7	729.0	786.5	865.0	905.5
157.5°	728.6	752.8	792.7	852.4	881.7
160°	745.1	765.4	796.9	844.0	869.3
162.5°	757.5	777.8	801.0	839.7	856.9
165°	781.3	791.5	807.2	828.3	843.4
167.5°	794.8	803.9	812.4	822.9	832.0
170°	807.2	812.3	812.4	822.8	827.9
172.5°	811.3	820.5	816.5	818.7	823.8
175°	822.7	827.8	822.7	817.4	812.4
177.5°	822.7	826.8	822.7	822.6	818.6
180°	822.7	822.7	822.7	822.7	822.7

(END OF REPORT)