

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: P645081

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

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P645081  
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-SR4F0-75D125U940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

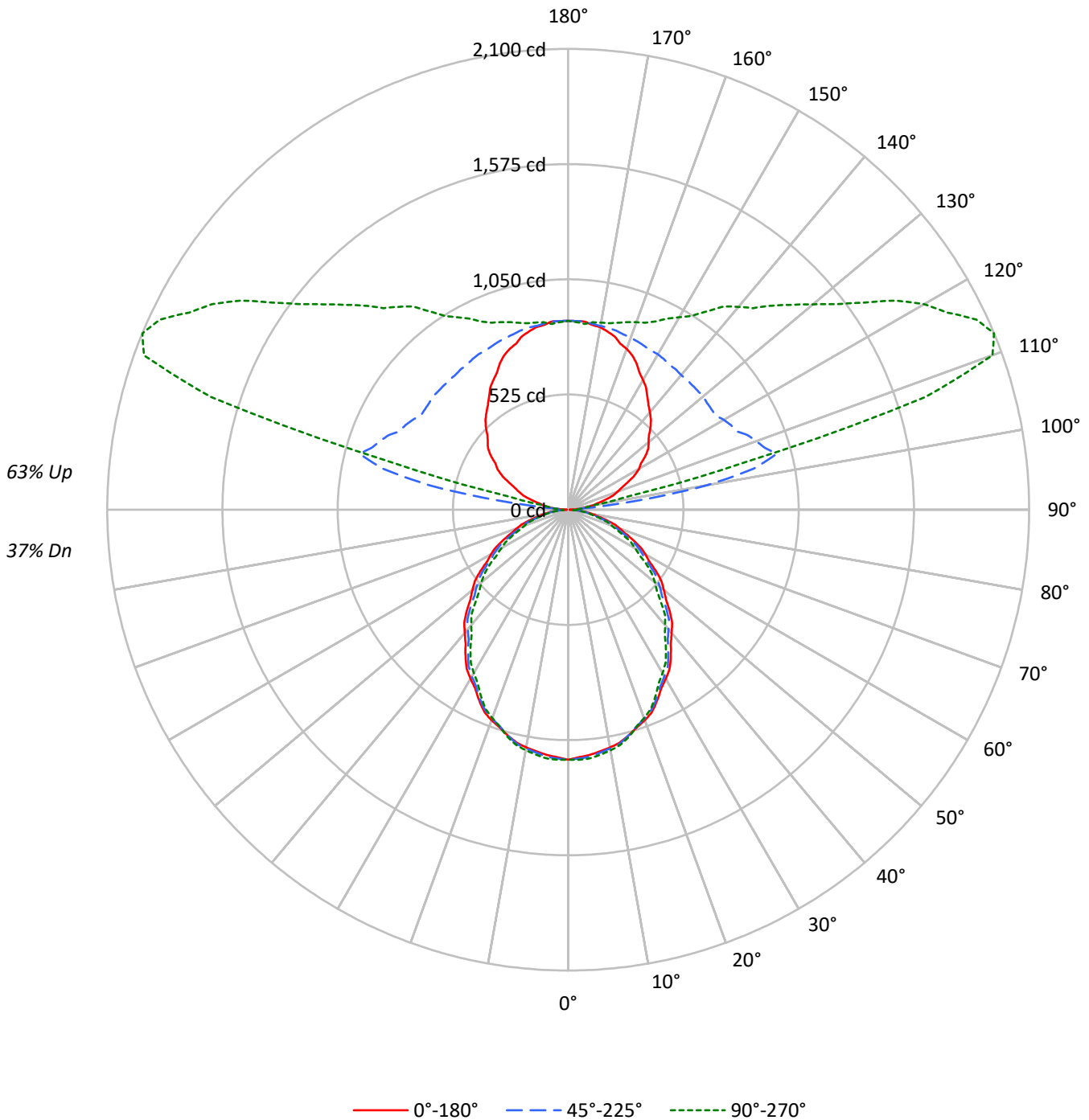
Lumens per Lamp: N/A  
Luminaire Lumens: 7402.3 lumens  
Efficiency: N/A  
Efficacy: 123.4 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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°	18390	18390	18390
5°	18185	18310	18436
10°	18039	18115	18243
15°	17795	17795	17899
20°	17546	17414	17361
25°	17090	16951	16730
30°	16583	16352	16035
35°	16066	15670	15303
40°	15449	14992	14469
45°	14933	14367	13659
50°	14285	13662	12961
55°	13743	13044	12259
60°	13110	12410	11360
65°	12432	11545	10655
70°	11778	10683	9951
75°	11023	9763	9283
80°	10088	8935	8498
85°	9466	8318	7744

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14933 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.1	1.4
10°-20°	300.7	4.1
20°-30°	437.2	5.9
30°-40°	497.3	6.7
40°-50°	484.9	6.6
50°-60°	413.9	5.6
60°-70°	300.8	4.1
70°-80°	170.1	2.3
80°-90°	54.3	0.7
90°-100°	112.4	1.5
100°-110°	757.5	10.2
110°-120°	1025.7	13.9
120°-130°	834.3	11.3
130°-140°	670.1	9.1
140°-150°	528.2	7.1
150°-160°	386.2	5.2
160°-170°	239.9	3.2
170°-180°	81.8	1.1
0°-30°	845.0	11.4
0°-40°	1342.3	18.1
0°-60°	2241.1	30.3
0°-90°	2766.3	37.4
90°-120°	1895.6	25.6
90°-150°	3928.2	53.1
90°-180°	4636.0	62.6
0°-180°	7402.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1139	1139	1139	1139	1139	
5°	1122	1139	1130	1128	1138	106
15°	1065	1078	1065	1063	1071	300
25°	959	968	952	935	939	441
35°	815	818	795	776	776	509
45°	654	651	629	607	598	503
55°	488	487	463	442	436	436
65°	325	322	302	284	279	323
75°	177	171	156	150	149	188
85°	51	45	45	43	42	55
90°	6	13	20	24	24	8
95°	56	87	48	54	63	58
105°	176	262	983	1253	828	186
115°	302	364	846	1755	2051	301
125°	431	489	797	1391	1645	382
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°	1139.0	1139.0	1139.0	1139.0	1139.0
2.5°	1129.1	1143.7	1135.3	1135.4	1140.3
5°	1122.0	1138.6	1129.7	1128.4	1137.5
7.5°	1110.2	1126.6	1116.1	1114.5	1126.3
10°	1100.3	1115.4	1104.9	1102.1	1112.7
12.5°	1086.6	1101.8	1091.3	1087.2	1097.8
15°	1064.6	1078.3	1064.6	1063.3	1070.8
17.5°	1039.8	1051.7	1035.8	1030.7	1036.4
20°	1021.2	1031.9	1013.5	1005.9	1010.4
22.5°	997.7	1008.3	988.7	977.4	983.1
25°	959.3	968.3	951.5	934.6	939.1
27.5°	918.0	925.0	908.1	890.8	892.3
30°	889.5	894.1	877.1	858.6	860.1
32.5°	859.8	863.1	844.9	825.1	825.4
35°	815.1	818.2	795.0	776.4	776.4
37.5°	767.7	769.5	744.8	724.6	722.5
40°	733.0	736.0	711.3	691.1	686.5
42.5°	700.8	701.4	679.1	658.8	653.0
45°	654.0	650.9	629.2	607.3	598.2
47.5°	603.4	603.4	578.7	556.8	548.3
50°	568.7	568.7	543.9	522.1	516.0
52.5°	536.5	535.3	511.7	489.8	481.3
55°	488.2	486.6	463.4	441.5	435.5
57.5°	437.0	437.0	415.3	391.9	385.3
60°	406.0	406.0	384.3	360.9	351.8
62.5°	372.5	371.3	349.6	328.7	323.3
65°	325.4	322.4	302.2	283.5	278.9
67.5°	280.5	277.5	256.0	241.1	238.0
70°	249.5	246.5	226.3	213.8	210.8
72.5°	219.7	215.5	197.7	187.8	184.7
75°	176.7	170.6	156.5	150.3	148.8
77.5°	135.8	125.4	119.6	115.3	113.7
80°	108.5	99.4	96.1	92.9	91.4
82.5°	84.9	75.8	75.0	73.1	71.6
85°	51.1	45.1	44.9	43.4	41.8
87.5°	22.3	20.0	21.4	22.2	22.2
90°	6.2	13.0	20.1	24.0	24.0
92.5°	24.1	26.1	30.6	40.1	43.2
95°	55.7	86.7	47.9	53.6	62.6
97.5°	87.7	160.4	322.5	96.6	82.7
100°	113.7	199.1	641.7	189.5	126.0
102.5°	138.4	228.0	866.8	497.5	272.0
105°	175.5	262.4	982.6	1252.8	828.0
107.5°	214.2	279.2	938.2	1822.6	1705.8
110°	238.9	300.9	912.3	1915.1	2056.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	264.9	326.9	886.3	1861.0	2099.7
115°	302.3	364.3	845.8	1754.7	2051.0
117.5°	342.3	403.3	836.0	1641.2	1946.0
120°	372.6	429.3	818.7	1554.9	1872.4
122.5°	393.0	455.2	797.1	1480.8	1772.9
125°	430.6	488.8	797.1	1391.2	1645.1
127.5°	460.5	520.9	798.1	1287.2	1538.0
130°	477.8	541.3	802.5	1217.6	1455.7
132.5°	498.2	561.7	801.2	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)