

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: P645030

Luminaire Tested: OMN4DIP-SR4F0-75D100U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645030
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-SR4F0-75D100U835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

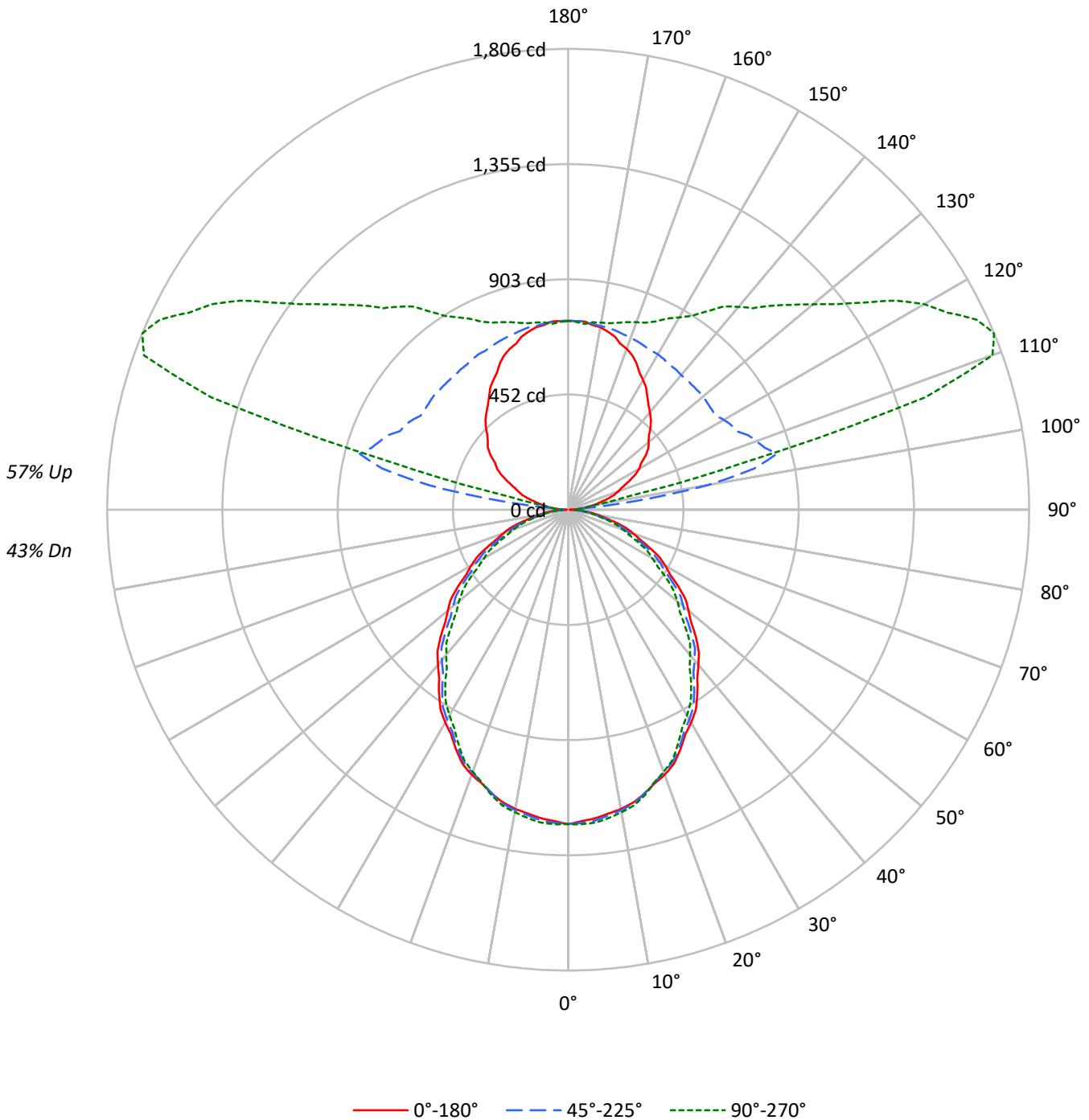
Lumens per Lamp: N/A
Luminaire Lumens: 6983.0 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.8
Input Voltage (V): 120
Input Current (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	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°	19900	19900	19900
5°	19676	19812	19948
10°	19520	19602	19739
15°	19256	19256	19368
20°	18986	18844	18785
25°	18492	18342	18104
30°	17944	17695	17350
35°	17385	16955	16559
40°	16716	16223	15656
45°	16157	15545	14780
50°	15458	14785	14026
55°	14869	14114	13264
60°	14186	13430	12290
65°	13452	12493	11530
70°	12746	11556	10768
75°	11928	10568	10044
80°	10916	9670	9196
85°	10244	9003	8392

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16157 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	1.7
10°-20°	325.3	4.7
20°-30°	473.1	6.8
30°-40°	538.1	7.7
40°-50°	524.7	7.5
50°-60°	447.9	6.4
60°-70°	325.5	4.7
70°-80°	184.1	2.6
80°-90°	58.3	0.8
90°-100°	98.1	1.4
100°-110°	652.3	9.3
110°-120°	882.6	12.6
120°-130°	717.8	10.3
130°-140°	576.3	8.3
140°-150°	454.2	6.5
150°-160°	332.1	4.8
160°-170°	206.3	3.0
170°-180°	70.3	1.0
0°-30°	914.3	13.1
0°-40°	1452.4	20.8
0°-60°	2425.0	34.7
0°-90°	2992.8	42.9
90°-120°	1633.0	23.4
90°-150°	3381.4	48.4
90°-180°	3990.0	57.1
0°-180°	6983.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1214	1232	1222	1221	1231	115
15°	1152	1167	1152	1150	1159	325
25°	1038	1048	1030	1011	1016	478
35°	882	885	860	840	840	551
45°	708	704	681	657	647	545
55°	528	527	501	478	471	471
65°	352	349	327	307	302	350
75°	191	185	169	163	161	203
85°	55	49	49	47	45	59
90°	7	13	19	22	22	8
95°	51	76	42	47	54	52
105°	153	227	846	1078	712	162
115°	261	314	728	1509	1764	260
125°	371	421	686	1196	1415	329
135°	456	506	689	985	1131	351
145°	540	585	693	858	949	339
155°	633	656	707	778	814	291
165°	703	712	726	745	759	197
175°	740	744	740	735	731	70
180°	740	740	740	740	740	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1221.8	1237.5	1228.5	1228.6	1233.8
5°	1214.0	1232.1	1222.4	1221.0	1230.8
7.5°	1201.3	1219.0	1207.7	1205.9	1218.7
10°	1190.6	1207.0	1195.6	1192.5	1204.0
12.5°	1175.8	1192.2	1180.8	1176.4	1187.9
15°	1152.0	1166.7	1152.0	1150.5	1158.7
17.5°	1125.2	1138.0	1120.8	1115.2	1121.5
20°	1105.0	1116.5	1096.7	1088.4	1093.3
22.5°	1079.6	1091.0	1069.8	1057.6	1063.8
25°	1038.0	1047.8	1029.6	1011.3	1016.2
27.5°	993.4	1000.9	982.6	963.9	965.5
30°	962.5	967.4	949.1	929.0	930.6
32.5°	930.3	933.9	914.2	892.8	893.1
35°	882.0	885.3	860.2	840.1	840.1
37.5°	830.7	832.7	805.9	784.0	781.7
40°	793.1	796.4	769.7	747.8	742.8
42.5°	758.3	758.9	734.8	712.9	706.6
45°	707.6	704.3	680.8	657.1	647.3
47.5°	653.0	653.0	626.1	602.4	593.3
50°	615.4	615.4	588.6	564.9	558.4
52.5°	580.5	579.2	553.7	530.0	520.8
55°	528.2	526.6	501.4	477.8	471.2
57.5°	472.9	472.9	449.4	424.1	416.9
60°	439.3	439.3	415.9	390.5	380.6
62.5°	403.1	401.8	378.3	355.7	349.8
65°	352.1	348.9	327.0	306.8	301.8
67.5°	303.5	300.2	277.0	260.8	257.6
70°	270.0	266.7	244.8	231.3	228.1
72.5°	237.8	233.2	214.0	203.2	199.9
75°	191.2	184.6	169.4	162.6	161.0
77.5°	146.9	135.7	129.5	124.7	123.1
80°	117.4	107.5	104.0	100.6	98.9
82.5°	91.9	82.1	81.2	79.1	77.5
85°	55.3	48.8	48.6	46.9	45.3
87.5°	24.1	21.4	22.7	23.2	23.2
90°	6.7	12.9	19.4	22.3	22.3
92.5°	23.2	24.2	27.9	36.0	38.3
95°	50.6	75.9	42.3	47.1	54.5
97.5°	77.8	139.3	278.4	83.7	71.5
100°	100.2	172.6	552.5	163.3	108.7
102.5°	121.2	197.2	746.1	428.2	234.0
105°	152.7	226.7	845.7	1077.8	712.1
107.5°	185.8	241.1	807.6	1567.8	1466.9
110°	206.8	259.8	785.2	1647.3	1768.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.2	282.1	762.9	1600.8	1805.8
115°	261.0	314.0	727.7	1509.0	1763.9
117.5°	295.4	347.5	719.3	1411.5	1673.6
120°	321.5	369.9	704.4	1337.3	1610.3
122.5°	338.8	392.1	685.8	1273.5	1524.7
125°	371.0	421.1	685.8	1196.4	1414.8
127.5°	396.3	448.6	686.7	1107.0	1322.7
130°	411.2	465.8	690.5	1047.2	1251.9
132.5°	428.5	483.1	689.1	1020.3	1188.6
135°	456.1	506.2	688.8	985.3	1130.9
137.5°	479.4	533.1	688.8	946.7	1071.4
140°	498.0	548.0	688.8	924.1	1037.8
142.5°	516.6	563.0	692.5	897.9	1004.3
145°	539.9	585.4	693.4	858.4	949.4
147.5°	567.8	607.8	699.0	830.0	900.1
150°	586.4	622.8	702.8	811.1	870.3
152.5°	605.0	637.8	702.8	796.0	844.2
155°	632.9	655.7	707.4	778.0	814.5
157.5°	655.3	677.1	713.0	766.7	793.0
160°	670.2	688.4	716.7	759.1	781.9
162.5°	681.3	699.6	720.4	755.2	770.7
165°	702.8	711.9	726.0	745.0	758.6
167.5°	714.9	723.0	730.7	740.2	748.4
170°	726.0	730.6	730.7	740.1	744.6
172.5°	729.8	737.9	734.4	736.4	740.9
175°	740.0	744.5	740.0	735.2	730.7
177.5°	740.0	743.6	740.0	739.9	736.3
180°	740.0	740.0	740.0	740.0	740.0

(END OF REPORT)