

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: P644571

Luminaire Tested: OMN4DIP-SR4F0-100D150U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644571
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-SR4F0-100D150U940-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

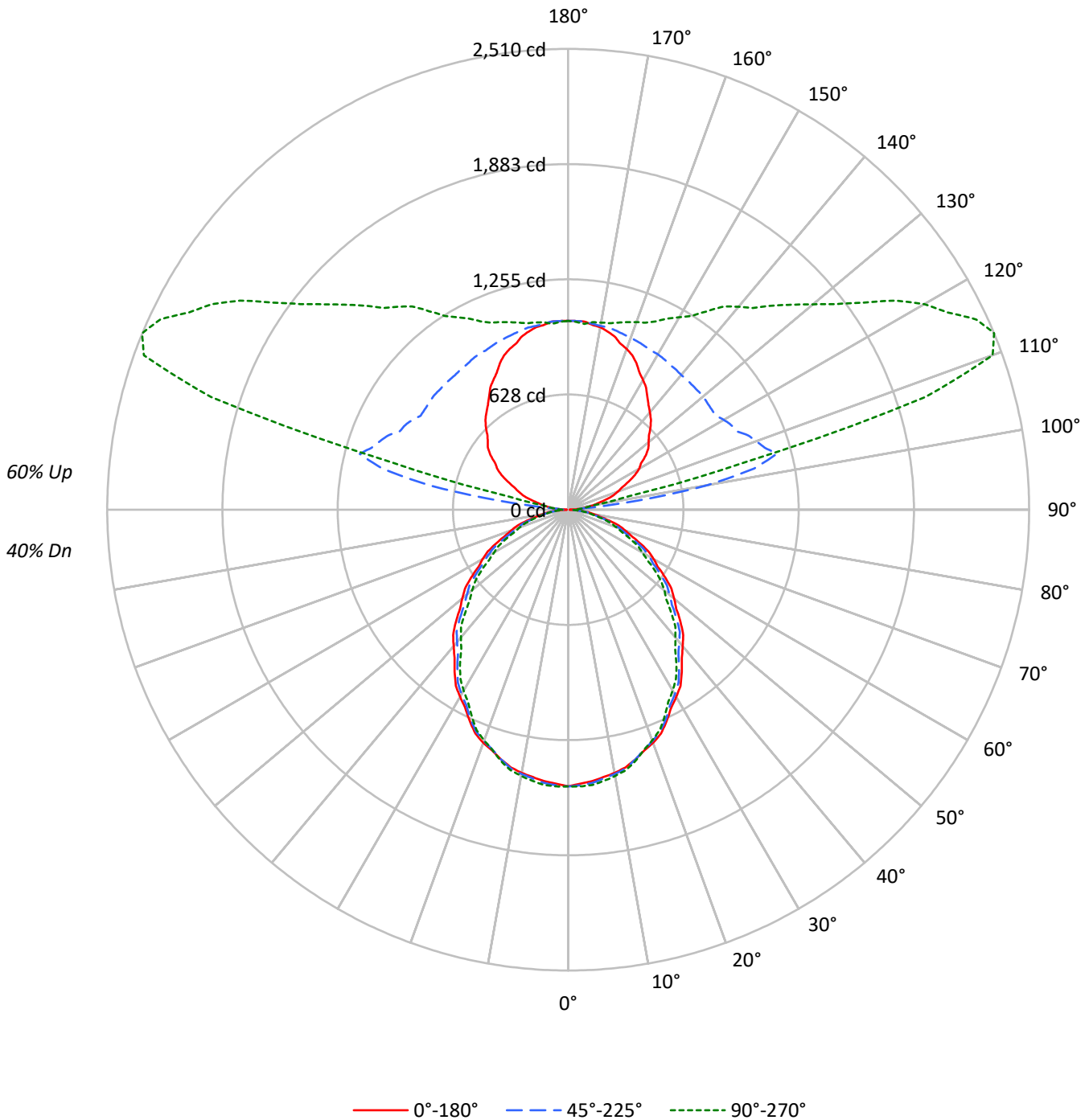
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9204.1 lumens
Efficiency: N/A
Efficacy: 117.2 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): 78.5
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	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	41	40	39	34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	36	35	33	28
3	79	70	63	57	72	64	58	53	53	48	45	42	39	36	32	30	29	24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	55	47	42	60	51	44	39	42	37	33	34	30	27	26	24	22	18
6	61	50	42	36	56	46	39	33	38	32	29	31	27	24	24	21	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	23	20	23	20	17	18	16	14	11
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24332	24332	24332
5°	24060	24225	24392
10°	23868	23968	24137
15°	23545	23545	23682
20°	23216	23039	22969
25°	22611	22427	22135
30°	21942	21636	21216
35°	21258	20731	20247
40°	20440	19835	19144
45°	19758	19009	18071
50°	18902	18078	17151
55°	18182	17258	16220
60°	17347	16420	15029
65°	16451	15274	14101
70°	15583	14134	13166
75°	14579	12919	12277
80°	13343	11818	11251
85°	12542	11023	10263

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19758 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.8	1.5
10°-20°	397.8	4.3
20°-30°	578.4	6.3
30°-40°	658.0	7.1
40°-50°	641.5	7.0
50°-60°	547.6	5.9
60°-70°	398.0	4.3
70°-80°	225.0	2.4
80°-90°	71.6	0.8
90°-100°	135.2	1.5
100°-110°	906.1	9.8
110°-120°	1226.6	13.3
120°-130°	997.6	10.8
130°-140°	801.1	8.7
140°-150°	631.5	6.9
150°-160°	461.7	5.0
160°-170°	286.8	3.1
170°-180°	97.8	1.1
0°-30°	1118.0	12.1
0°-40°	1776.0	19.3
0°-60°	2965.1	32.2
0°-90°	3659.7	39.8
90°-120°	2267.9	24.6
90°-150°	4698.1	51.0
90°-180°	5544.0	60.2
0°-180°	9204.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1507	1507	1507	1507	1507	
5°	1484	1506	1495	1493	1505	141
15°	1409	1427	1409	1407	1417	397
25°	1269	1281	1259	1236	1242	584
35°	1078	1082	1052	1027	1027	673
45°	865	861	832	804	791	666
55°	646	644	613	584	576	576
65°	431	427	400	375	369	427
75°	234	226	207	199	197	248
85°	68	60	60	57	55	73
90°	8	16	25	30	30	10
95°	68	104	58	65	75	70
105°	211	314	1175	1498	990	223
115°	362	436	1011	2098	2452	360
125°	515	585	953	1663	1967	457
135°	634	704	958	1370	1572	488
145°	750	814	964	1193	1320	471
155°	880	912	983	1082	1132	404
165°	977	990	1009	1036	1055	274
175°	1029	1035	1029	1022	1016	97
180°	1029	1029	1029	1029	1029	



TEST NUMBER: P644571

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1507.0	1507.0	1507.0	1507.0	1507.0
2.5°	1493.9	1513.1	1502.1	1502.2	1508.7
5°	1484.5	1506.5	1494.7	1492.9	1505.0
7.5°	1468.9	1490.5	1476.7	1474.6	1490.2
10°	1455.8	1475.8	1461.9	1458.1	1472.2
12.5°	1437.7	1457.8	1443.9	1438.4	1452.5
15°	1408.6	1426.6	1408.6	1406.8	1416.8
17.5°	1375.8	1391.4	1370.5	1363.7	1371.3
20°	1351.2	1365.2	1340.9	1330.8	1336.8
22.5°	1320.0	1334.1	1308.1	1293.1	1300.8
25°	1269.2	1281.2	1258.9	1236.5	1242.5
27.5°	1214.6	1223.9	1201.5	1178.6	1180.6
30°	1176.9	1182.9	1160.5	1136.0	1138.0
32.5°	1137.5	1142.0	1117.9	1091.6	1092.0
35°	1078.5	1082.5	1051.8	1027.2	1027.2
37.5°	1015.8	1018.2	985.4	958.7	955.9
40°	969.8	973.8	941.1	914.3	908.3
42.5°	927.2	928.0	898.5	871.6	864.0
45°	865.3	861.2	832.5	803.5	791.4
47.5°	798.4	798.4	765.6	736.6	725.4
50°	752.5	752.5	719.7	690.8	682.8
52.5°	709.8	708.2	677.0	648.1	636.8
55°	645.9	643.9	613.1	584.2	576.2
57.5°	578.2	578.2	549.5	518.5	509.7
60°	537.2	537.2	508.5	477.5	465.4
62.5°	492.9	491.3	462.6	434.9	427.7
65°	430.6	426.6	399.8	375.1	369.1
67.5°	371.1	367.1	338.7	318.9	314.9
70°	330.1	326.1	299.4	282.9	278.9
72.5°	290.7	285.1	261.6	248.4	244.4
75°	233.7	225.7	207.1	198.8	196.8
77.5°	179.6	166.0	158.3	152.5	150.5
80°	143.5	131.5	127.1	123.0	121.0
82.5°	112.4	100.3	99.2	96.7	94.7
85°	67.7	59.6	59.5	57.4	55.4
87.5°	29.5	26.4	28.0	28.9	28.9
90°	8.2	16.5	25.2	29.7	29.7
92.5°	30.3	32.2	37.5	48.8	52.3
95°	68.2	104.4	57.9	64.6	75.3
97.5°	106.2	192.6	386.2	115.9	99.1
100°	137.3	238.8	767.5	226.8	150.9
102.5°	166.7	273.3	1036.7	595.0	325.2
105°	210.8	314.3	1175.1	1498.0	989.9
107.5°	257.0	334.4	1122.1	2179.2	2039.3
110°	286.4	360.3	1091.0	2289.7	2458.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	317.5	391.4	1060.0	2225.1	2510.3
115°	362.0	435.9	1011.3	2097.8	2452.0
117.5°	409.9	482.5	999.7	1962.2	2326.5
120°	446.1	513.7	979.0	1859.0	2238.5
122.5°	470.3	544.6	953.1	1770.3	2119.5
125°	515.2	584.8	953.1	1663.2	1966.8
127.5°	550.7	623.1	954.4	1538.9	1838.7
130°	571.4	647.3	959.6	1455.7	1740.4
132.5°	595.6	671.5	957.9	1418.3	1652.4
135°	634.0	703.6	957.5	1369.7	1572.2
137.5°	666.4	741.0	957.5	1316.0	1489.3
140°	692.3	761.9	957.5	1284.6	1442.8
142.5°	718.1	782.7	962.7	1248.1	1396.2
145°	750.5	813.8	964.0	1193.3	1319.8
147.5°	789.3	845.0	971.8	1153.8	1251.3
150°	815.2	865.8	976.9	1127.6	1209.8
152.5°	841.1	886.6	976.9	1106.6	1173.6
155°	879.9	911.5	983.4	1081.6	1132.2
157.5°	910.9	941.3	991.2	1065.8	1102.4
160°	931.6	957.0	996.3	1055.3	1086.9
162.5°	947.2	972.5	1001.5	1049.9	1071.4
165°	976.9	989.6	1009.3	1035.6	1054.6
167.5°	993.8	1005.1	1015.8	1029.0	1040.3
170°	1009.3	1015.6	1015.8	1028.8	1035.2
172.5°	1014.5	1025.8	1020.9	1023.7	1030.0
175°	1028.7	1035.0	1028.7	1022.1	1015.8
177.5°	1028.7	1033.8	1028.7	1028.6	1023.5
180°	1028.7	1028.7	1028.7	1028.7	1028.7

(END OF REPORT)