

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: P644661

Luminaire Tested: OMN4DIP-SR4F0-100D75U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644661
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-SR4F0-100D75U940-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

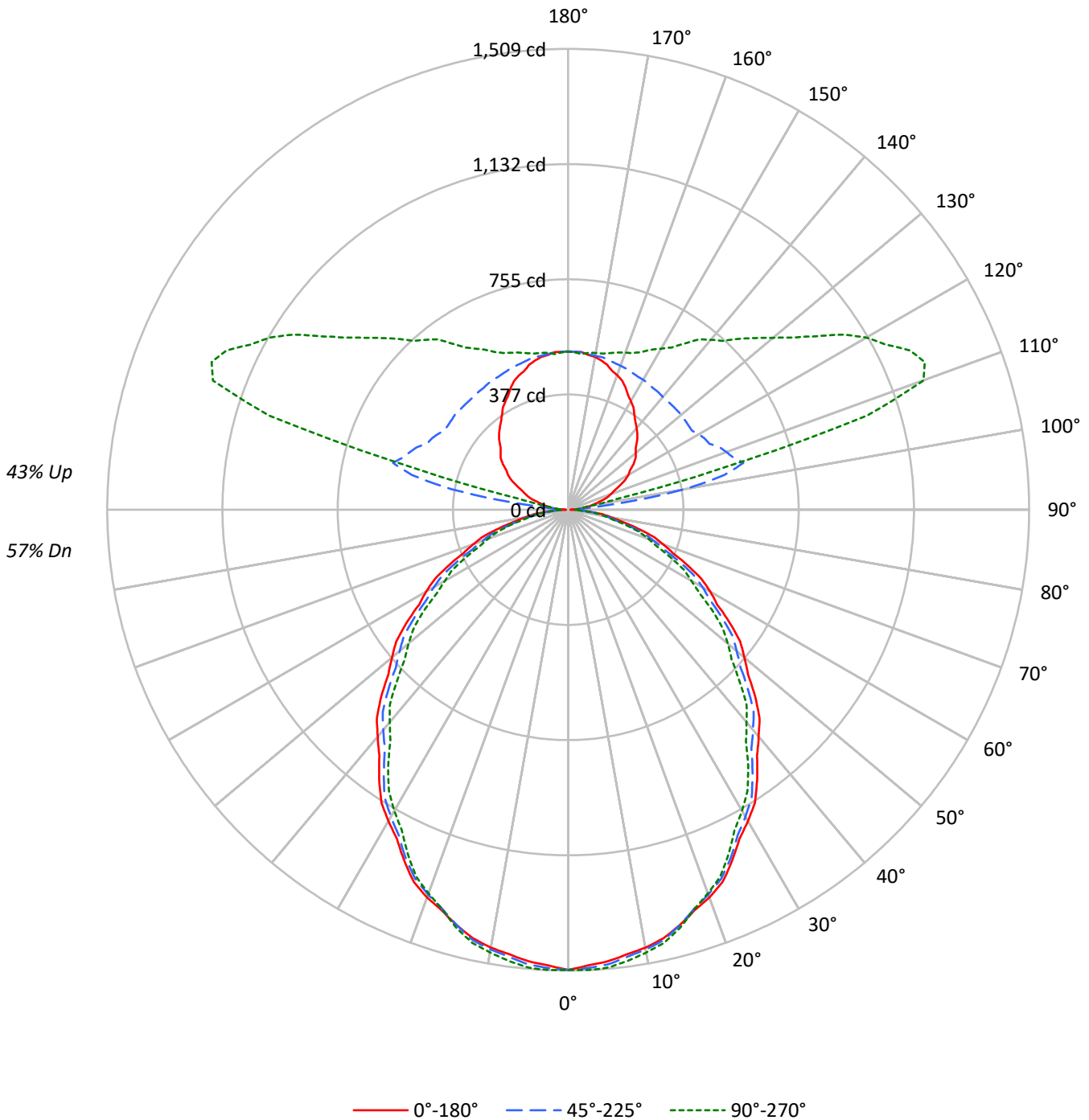
Lumens per Lamp: N/A
Luminaire Lumens: 6458.5 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.7
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										
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	50	30	10	50	30	10	0														
RCR																																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57																				
1	99	95	91	88	92	89	85	82	76	74	72	65	64	62	55	54	53	48																				
2	91	83	77	72	84	78	72	68	67	63	60	58	55	52	49	46	45	40																				
3	83	73	66	60	77	68	62	57	59	54	50	51	47	44	43	40	38	34																				
4	76	65	57	51	70	61	54	48	53	47	43	46	41	38	39	36	33	29																				
5	70	58	50	44	65	54	47	41	47	42	37	41	36	33	35	32	29	26																				
6	64	52	44	38	60	49	42	36	43	37	33	37	32	29	32	28	25	23																				
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	29	25	23	20																				
8	55	43	35	30	51	40	33	28	35	30	26	31	26	23	27	23	20	18																				
9	51	39	32	27	48	37	30	25	33	27	23	29	24	21	25	21	18	16																				
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17	15																				

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	2.2
10°-20°	397.8	6.2
20°-30°	578.4	9.0
30°-40°	658.0	10.2
40°-50°	641.5	9.9
50°-60°	547.6	8.5
60°-70°	398.0	6.2
70°-80°	225.0	3.5
80°-90°	70.5	1.1
90°-100°	72.4	1.1
100°-110°	458.5	7.1
110°-120°	618.9	9.6
120°-130°	503.0	7.8
130°-140°	403.3	6.2
140°-150°	317.8	4.9
150°-160°	232.4	3.6
160°-170°	144.4	2.2
170°-180°	49.2	0.8
0°-30°	1118.0	17.3
0°-40°	1776.0	27.5
0°-60°	2965.1	45.9
0°-90°	3658.6	56.6
90°-120°	1149.8	17.8
90°-150°	2374.0	36.8
90°-180°	2800.0	43.4
0°-180°	6458.5	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	13	19	20	20	9
95°	42	57	32	36	40	41
105°	111	161	594	755	498	118
115°	185	222	510	1056	1234	185
125°	261	296	481	837	990	232
135°	319	354	482	689	791	246
145°	378	410	485	601	664	237
155°	443	459	495	544	570	203
165°	492	498	508	521	531	138
175°	518	521	518	514	511	49
180°	518	518	518	518	518	

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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	25.8	26.7	27.0	27.0
90°	8.2	13.4	18.8	20.0	20.0
92.5°	22.6	21.4	23.4	28.8	29.8
95°	42.5	56.7	32.2	35.6	39.9
97.5°	60.6	101.1	197.2	60.1	50.9
100°	76.2	124.3	388.4	115.2	77.0
102.5°	90.2	140.9	523.8	300.5	163.9
105°	111.2	161.3	593.5	755.0	498.3
107.5°	134.2	171.4	566.8	1097.9	1026.5
110°	148.2	184.4	551.2	1153.5	1237.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	200.1	535.6	1121.0	1263.5
115°	185.3	221.5	510.1	1055.9	1234.2
117.5°	209.4	244.9	504.2	987.6	1171.1
120°	227.6	260.6	493.8	935.7	1126.8
122.5°	239.0	276.2	480.8	891.1	1066.8
125°	261.4	296.4	480.8	837.2	990.0
127.5°	278.2	315.5	481.4	774.6	925.5
130°	288.6	326.8	484.0	732.7	876.0
132.5°	300.0	338.2	482.4	713.9	831.7
135°	319.1	354.2	482.0	689.4	791.3
137.5°	335.4	373.0	482.0	662.4	749.7
140°	348.5	383.5	482.0	646.6	726.2
142.5°	361.5	394.0	484.6	628.3	702.8
145°	377.8	409.6	485.2	600.7	664.3
147.5°	397.3	425.3	489.1	580.8	629.8
150°	410.3	435.8	491.7	567.6	609.0
152.5°	423.4	446.3	491.7	557.0	590.7
155°	442.9	458.8	495.0	544.4	569.9
157.5°	458.5	473.8	498.9	536.4	554.9
160°	468.9	481.7	501.5	531.2	547.1
162.5°	476.8	489.5	504.1	528.5	539.3
165°	491.7	498.1	508.0	521.3	530.8
167.5°	500.2	505.9	511.3	517.9	523.7
170°	508.0	511.2	511.3	517.9	521.0
172.5°	510.6	516.4	513.9	515.3	518.4
175°	517.8	521.0	517.8	514.5	511.3
177.5°	517.8	520.3	517.8	517.7	515.2
180°	517.8	517.8	517.8	517.8	517.8

(END OF REPORT)