

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: P644601

Luminaire Tested: OMN4DIP-SR4F0-100D25U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644601
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-SR4F0-100D25U940-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

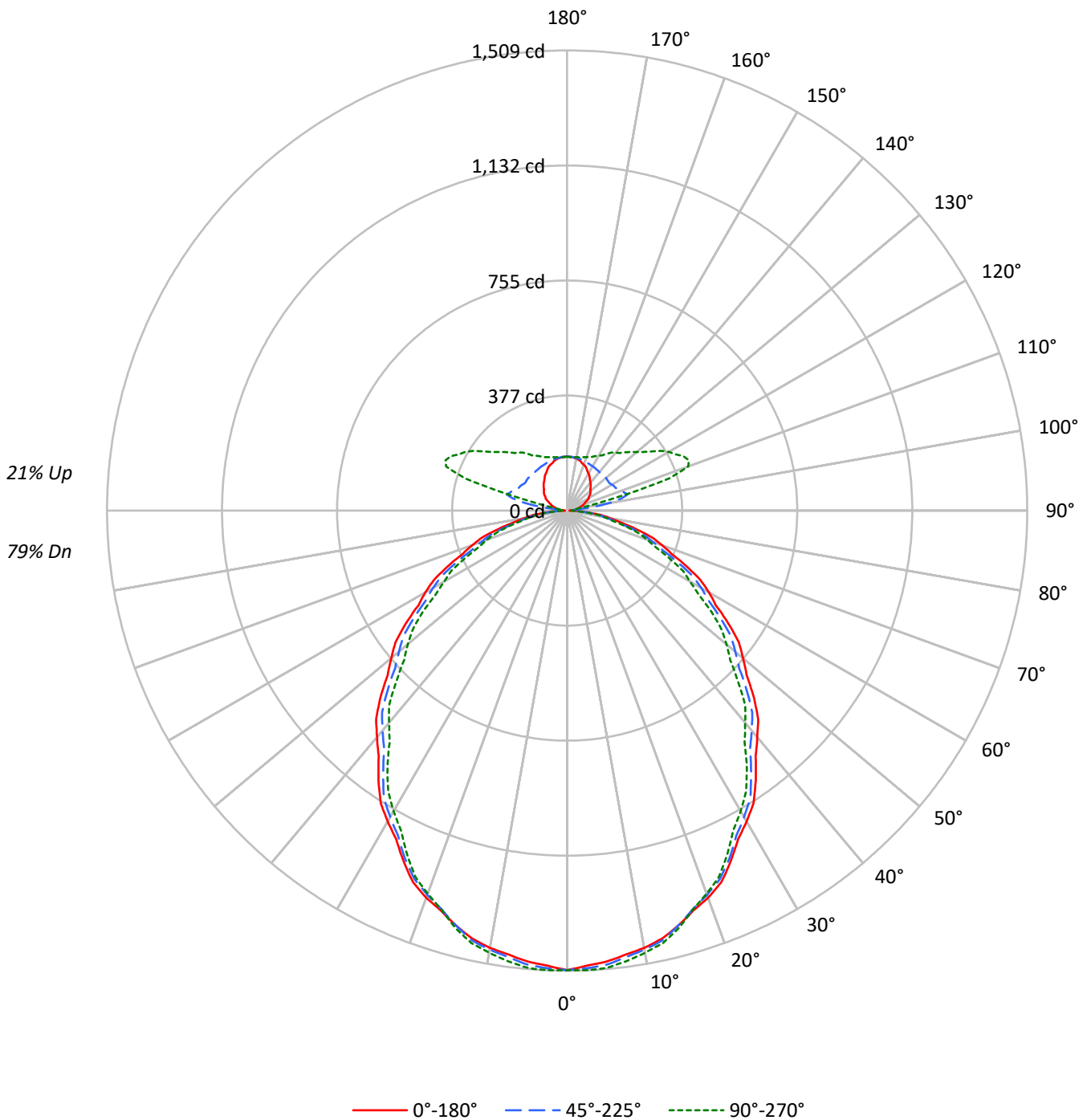
Lumens per Lamp: N/A
Luminaire Lumens: 4626.0 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.2
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	114	114	114	114	109	109	109	109	99	99	99	91	91	91	83	83	83	79																				
1	104	100	96	92	100	96	92	89	88	85	82	80	78	76	73	72	70	67																				
2	95	87	81	76	91	84	78	73	77	72	68	71	67	64	65	62	59	56																				
3	87	77	69	63	83	74	67	61	68	62	58	63	58	54	58	54	51	48																				
4	80	69	60	54	76	66	58	52	61	54	50	56	51	47	52	47	44	41																				
5	74	61	53	47	70	59	51	45	55	48	43	50	45	41	47	42	38	36																				
6	68	55	47	41	65	53	45	40	49	43	38	46	40	36	42	38	34	32																				
7	63	50	42	36	60	48	41	35	45	38	34	42	36	32	39	34	30	28																				
8	59	46	38	32	56	44	37	31	41	35	30	38	33	29	36	31	27	25																				
9	55	42	34	29	52	41	33	28	38	32	27	35	30	26	33	28	25	23																				
10	51	39	31	26	49	38	30	26	35	29	25	33	27	24	31	26	23	21																				

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	3.1
10°-20°	397.8	8.6
20°-30°	578.4	12.5
30°-40°	658.0	14.2
40°-50°	641.5	13.9
50°-60°	547.6	11.8
60°-70°	398.0	8.6
70°-80°	225.0	4.9
80°-90°	69.7	1.5
90°-100°	30.5	0.7
100°-110°	159.8	3.5
110°-120°	213.3	4.6
120°-130°	172.9	3.7
130°-140°	137.9	3.0
140°-150°	108.5	2.3
150°-160°	79.4	1.7
160°-170°	49.3	1.1
170°-180°	16.8	0.4
0°-30°	1118.0	24.2
0°-40°	1776.0	38.4
0°-60°	2965.1	64.1
0°-90°	3657.8	79.1
90°-120°	403.5	8.7
90°-150°	822.8	17.8
90°-180°	968.0	20.9
0°-180°	4626.0	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	11	14	14	14	9
95°	25	25	15	16	16	22
105°	45	59	205	259	170	48
115°	67	78	176	360	421	68
125°	92	104	166	286	338	81
135°	109	121	165	235	270	84
145°	129	140	166	205	227	81
155°	151	157	169	186	195	69
165°	168	170	174	178	181	47
175°	177	178	177	176	175	17
180°	177	177	177	177	177	

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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	25.3	25.9	25.7	25.7
90°	8.2	11.3	14.5	13.6	13.6
92.5°	17.4	14.1	13.9	15.5	14.8
95°	25.3	24.9	15.0	16.2	16.3
97.5°	30.1	40.0	71.1	22.9	18.7
100°	35.5	47.9	135.3	40.7	27.6
102.5°	39.2	52.5	181.6	103.9	56.2
105°	44.7	59.2	205.4	259.1	170.1
107.5°	52.3	62.6	196.2	376.2	350.5
110°	56.0	67.1	190.9	395.2	422.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	61.4	72.4	185.6	384.1	431.4
115°	67.3	78.3	175.5	360.5	421.4
117.5°	75.5	86.4	173.5	337.2	399.9
120°	81.8	91.7	170.0	319.5	384.7
122.5°	84.6	97.0	165.5	304.3	364.3
125°	91.9	103.9	165.5	285.8	338.0
127.5°	96.3	110.1	165.7	264.5	316.0
130°	99.9	112.9	166.6	250.2	299.1
132.5°	102.7	115.8	165.0	243.8	284.0
135°	109.0	120.9	164.6	235.4	270.2
137.5°	114.5	127.4	164.6	226.2	256.0
140°	119.0	130.9	164.6	220.8	248.0
142.5°	123.4	134.5	165.5	214.5	240.0
145°	129.0	139.9	165.7	205.1	226.8
147.5°	135.7	145.2	167.0	198.3	215.0
150°	140.1	148.8	167.9	193.8	207.9
152.5°	144.6	152.4	167.9	190.2	201.7
155°	151.2	156.7	169.0	185.9	194.6
157.5°	156.6	161.8	170.3	183.2	189.5
160°	160.1	164.5	171.2	181.4	186.8
162.5°	162.8	167.1	172.1	180.4	184.1
165°	167.9	170.1	173.5	178.0	181.2
167.5°	170.8	172.7	174.6	176.8	178.8
170°	173.5	174.5	174.6	176.8	177.9
172.5°	174.4	176.3	175.5	175.9	177.0
175°	176.8	177.9	176.8	175.7	174.6
177.5°	176.8	177.7	176.8	176.8	175.9
180°	176.8	176.8	176.8	176.8	176.8

(END OF REPORT)