

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: P644614

Luminaire Tested: OMN4DIP-SR4F0-100D50U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644614
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-SR4F0-100D50U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

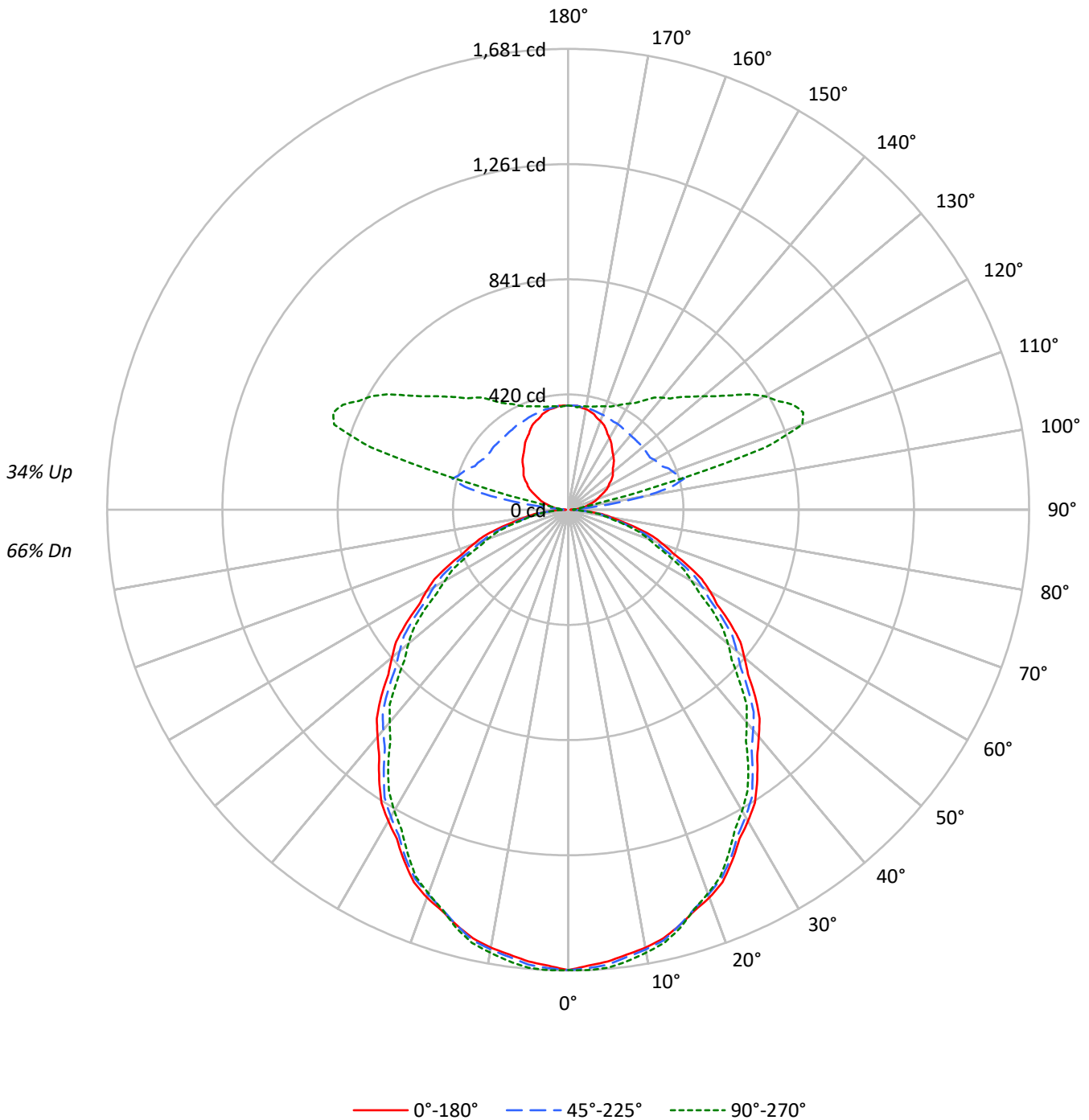
Lumens per Lamp: N/A
Luminaire Lumens: 6139.4 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): 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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66				
1	102	97	93	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56				
2	93	85	79	73	87	80	75	70	71	67	63	63	60	57	56	53	51	47				
3	85	75	67	61	79	71	64	59	63	58	53	56	52	48	49	46	44	40				
4	78	66	58	52	73	63	56	50	56	50	46	50	45	42	44	41	38	35				
5	71	59	51	45	67	56	49	43	51	44	40	45	40	36	40	36	33	30				
6	66	53	45	39	62	51	43	38	46	39	35	41	36	32	36	32	29	27				
7	61	48	40	35	57	46	39	33	42	35	31	37	32	28	33	29	26	24				
8	57	44	36	31	53	42	35	30	38	32	28	34	29	25	31	27	23	21				
9	53	40	33	28	50	39	31	27	35	29	25	32	27	23	28	24	21	19				
10	50	37	30	25	47	36	29	24	32	26	22	29	24	21	26	22	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27114	27114	27114
5°	26810	26995	27180
10°	26596	26707	26896
15°	26236	26236	26390
20°	25871	25673	25596
25°	25196	24991	24667
30°	24449	24110	23640
35°	23688	23103	22563
40°	22778	22103	21332
45°	22016	21181	20137
50°	21062	20142	19110
55°	20259	19229	18072
60°	19330	18296	16746
65°	18330	17020	15713
70°	17363	15748	14667
75°	16251	14398	13681
80°	14868	13175	12534
85°	13968	12282	11430

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22016 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.0	2.6
10°-20°	443.3	7.2
20°-30°	644.6	10.5
30°-40°	733.2	11.9
40°-50°	714.9	11.6
50°-60°	610.2	9.9
60°-70°	443.4	7.2
70°-80°	250.8	4.1
80°-90°	78.1	1.3
90°-100°	56.5	0.9
100°-110°	338.5	5.5
110°-120°	455.6	7.4
120°-130°	370.0	6.0
130°-140°	296.2	4.8
140°-150°	233.4	3.8
150°-160°	170.7	2.8
160°-170°	106.0	1.7
170°-180°	36.1	0.6
0°-30°	1245.8	20.3
0°-40°	1979.0	32.2
0°-60°	3304.1	53.8
0°-90°	4076.4	66.4
90°-120°	850.6	13.9
90°-150°	1750.2	28.5
90°-180°	2063.0	33.6
0°-180°	6139.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1679	1679	1679	1679	1679	
5°	1654	1679	1666	1664	1677	157
15°	1570	1590	1570	1568	1579	442
25°	1414	1428	1403	1378	1385	651
35°	1202	1206	1172	1145	1145	750
45°	964	960	928	895	882	742
55°	720	718	683	651	642	642
65°	480	475	446	418	411	476
75°	260	252	231	222	219	276
85°	75	66	66	64	62	81
90°	9	14	18	19	19	10
95°	37	45	26	28	31	35
105°	86	121	437	555	366	91
115°	138	164	375	775	906	138
125°	194	219	354	615	727	172
135°	234	260	354	506	581	181
145°	277	301	356	441	488	174
155°	325	337	364	400	418	149
165°	361	366	373	383	390	101
175°	380	382	380	378	375	36
180°	380	380	380	380	380	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1679.3	1679.3	1679.3	1679.3	1679.3
2.5°	1664.7	1686.1	1673.8	1674.0	1681.1
5°	1654.2	1678.7	1665.6	1663.6	1677.0
7.5°	1636.8	1660.9	1645.5	1643.1	1660.6
10°	1622.2	1644.5	1629.0	1624.8	1640.5
12.5°	1602.1	1624.4	1608.9	1602.9	1618.5
15°	1569.6	1589.7	1569.6	1567.6	1578.8
17.5°	1533.1	1550.5	1527.1	1519.6	1528.0
20°	1505.7	1521.3	1494.2	1483.0	1489.7
22.5°	1470.9	1486.6	1457.7	1441.0	1449.4
25°	1414.3	1427.7	1402.8	1377.9	1384.6
27.5°	1353.5	1363.8	1338.9	1313.3	1315.6
30°	1311.4	1318.1	1293.2	1265.8	1268.0
32.5°	1267.6	1272.5	1245.6	1216.4	1216.9
35°	1201.8	1206.2	1172.1	1144.7	1144.7
37.5°	1131.9	1134.5	1098.1	1068.3	1065.2
40°	1080.7	1085.2	1048.7	1018.8	1012.1
42.5°	1033.2	1034.1	1001.2	971.3	962.8
45°	964.2	959.7	927.6	895.3	881.9
47.5°	889.7	889.7	853.1	820.9	808.3
50°	838.5	838.5	801.9	769.8	760.8
52.5°	791.0	789.2	754.4	722.2	709.6
55°	719.7	717.5	683.1	651.0	642.0
57.5°	644.3	644.3	612.3	577.8	568.0
60°	598.6	598.6	566.6	532.0	518.6
62.5°	549.3	547.5	515.4	484.6	476.6
65°	479.8	475.3	445.5	418.0	411.3
67.5°	413.5	409.1	377.4	355.4	350.9
70°	367.8	363.4	333.6	315.2	310.7
72.5°	324.0	317.7	291.5	276.8	272.3
75°	260.5	251.5	230.8	221.6	219.3
77.5°	200.1	185.0	176.4	169.9	167.7
80°	159.9	146.5	141.7	137.0	134.8
82.5°	125.2	111.8	110.6	107.8	105.6
85°	75.4	66.5	66.3	63.9	61.7
87.5°	32.9	28.5	29.3	29.3	29.3
90°	9.1	13.7	18.5	18.6	18.6
92.5°	22.2	19.6	20.6	24.4	24.5
95°	37.4	44.8	26.0	28.4	30.9
97.5°	49.9	77.4	147.0	45.6	38.2
100°	61.4	94.5	286.7	85.3	57.3
102.5°	71.1	106.0	386.2	221.4	120.5
105°	85.6	120.8	437.4	555.1	365.9
107.5°	102.3	128.2	417.8	806.9	753.7
110°	112.0	137.8	406.3	847.8	908.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	123.4	149.3	394.8	823.9	927.8
115°	138.4	164.2	375.3	775.3	906.3
117.5°	156.1	181.4	371.0	725.2	859.9
120°	169.5	192.9	363.4	687.1	827.4
122.5°	177.2	204.3	353.8	654.3	783.4
125°	193.5	219.2	353.8	614.7	726.9
127.5°	205.1	233.0	354.3	568.8	679.6
130°	212.7	240.8	356.2	538.0	643.2
132.5°	220.4	248.5	354.4	524.2	610.7
135°	234.3	260.1	353.9	506.2	581.1
137.5°	246.3	273.9	353.9	486.4	550.5
140°	255.9	281.6	353.9	474.8	533.2
142.5°	265.4	289.3	355.8	461.3	516.0
145°	277.4	300.8	356.3	441.0	487.8
147.5°	291.7	312.3	359.2	426.5	462.5
150°	301.3	320.0	361.1	416.8	447.2
152.5°	310.9	327.7	361.1	409.0	433.8
155°	325.2	336.9	363.5	399.8	418.5
157.5°	336.7	347.9	366.3	393.9	407.5
160°	344.3	353.7	368.2	390.0	401.7
162.5°	350.1	359.4	370.2	388.0	396.0
165°	361.1	365.7	373.0	382.8	389.8
167.5°	367.3	371.5	375.4	380.3	384.5
170°	373.0	375.4	375.4	380.3	382.6
172.5°	374.9	379.1	377.3	378.3	380.7
175°	380.2	382.5	380.2	377.8	375.4
177.5°	380.2	382.1	380.2	380.2	378.3
180°	380.2	380.2	380.2	380.2	380.2

(END OF REPORT)