

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: P644589

Luminaire Tested: OMN4DIP-SR4F0-100D25U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644589
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-SR4F0-100D25U930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

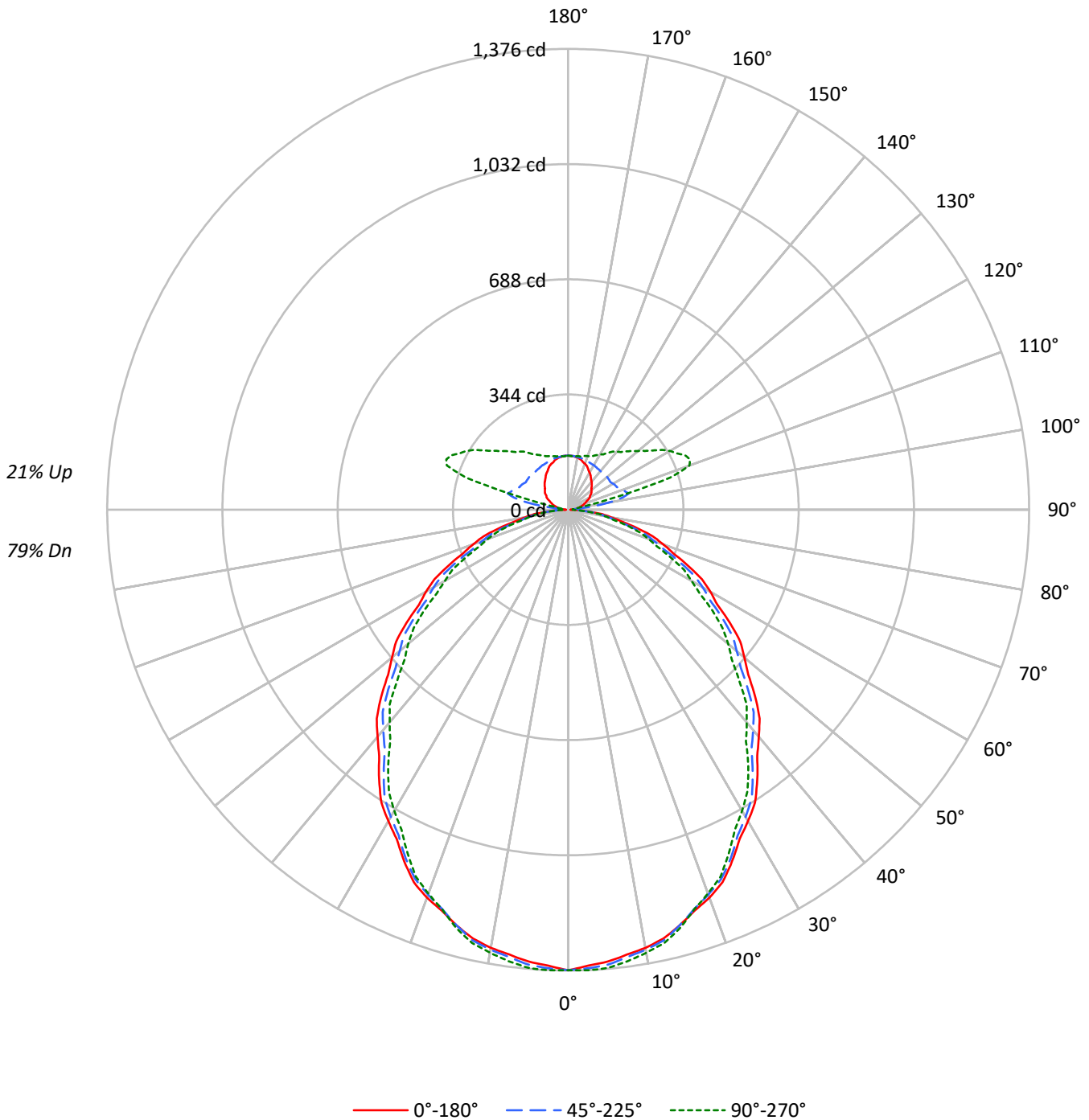
Lumens per Lamp: N/A
Luminaire Lumens: 4220.6 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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					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	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°	22201	22201	22201
5°	21951	22102	22255
10°	21776	21868	22022
15°	21483	21483	21608
20°	21182	21021	20957
25°	20630	20462	20197
30°	20020	19740	19356
35°	19395	18916	18473
40°	18649	18099	17466
45°	18025	17342	16488
50°	17246	16493	15646
55°	16588	15744	14798
60°	15826	14980	13714
65°	15007	13937	12863
70°	14219	12892	12010
75°	13306	11784	11204
80°	12171	10786	10265
85°	11430	10059	9355

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18025 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.3	3.1
10°-20°	363.0	8.6
20°-30°	527.7	12.5
30°-40°	600.3	14.2
40°-50°	585.3	13.9
50°-60°	499.6	11.8
60°-70°	363.1	8.6
70°-80°	205.3	4.9
80°-90°	63.6	1.5
90°-100°	27.8	0.7
100°-110°	145.8	3.5
110°-120°	194.6	4.6
120°-130°	157.7	3.7
130°-140°	125.8	3.0
140°-150°	99.0	2.3
150°-160°	72.4	1.7
160°-170°	45.0	1.1
170°-180°	15.3	0.4
0°-30°	1020.0	24.2
0°-40°	1620.4	38.4
0°-60°	2705.3	64.1
0°-90°	3337.3	79.1
90°-120°	368.1	8.7
90°-150°	750.7	17.8
90°-180°	883.0	20.9
0°-180°	4220.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1354	1374	1364	1362	1373	128
15°	1285	1302	1285	1284	1293	362
25°	1158	1169	1149	1128	1134	533
35°	984	988	960	937	937	614
45°	789	786	760	733	722	608
55°	589	587	559	533	526	526
65°	393	389	365	342	337	390
75°	213	206	189	181	180	226
85°	62	54	54	52	50	66
90°	8	10	13	12	12	8
95°	23	23	14	15	15	20
105°	41	54	187	236	155	44
115°	61	72	160	329	384	62
125°	84	95	151	261	308	74
135°	99	110	150	215	246	77
145°	118	128	151	187	207	74
155°	138	143	154	170	178	63
165°	153	155	158	162	165	43
175°	161	162	161	160	159	15
180°	161	161	161	161	161	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1375.0	1375.0	1375.0	1375.0	1375.0
2.5°	1363.0	1380.6	1370.5	1370.6	1376.5
5°	1354.4	1374.5	1363.7	1362.1	1373.1
7.5°	1340.2	1359.9	1347.3	1345.4	1359.6
10°	1328.2	1346.5	1333.8	1330.4	1343.2
12.5°	1311.7	1330.0	1317.4	1312.4	1325.2
15°	1285.2	1301.6	1285.2	1283.5	1292.7
17.5°	1255.2	1269.5	1250.4	1244.2	1251.1
20°	1232.8	1245.6	1223.4	1214.2	1219.7
22.5°	1204.4	1217.2	1193.5	1179.8	1186.8
25°	1158.0	1168.9	1148.6	1128.2	1133.7
27.5°	1108.2	1116.6	1096.2	1075.3	1077.2
30°	1073.8	1079.3	1058.8	1036.4	1038.2
32.5°	1037.9	1041.9	1019.9	996.0	996.3
35°	984.0	987.7	959.7	937.2	937.2
37.5°	926.7	928.9	899.1	874.7	872.1
40°	884.8	888.5	858.7	834.2	828.7
42.5°	845.9	846.7	819.7	795.3	788.3
45°	789.4	785.8	759.5	733.1	722.1
47.5°	728.5	728.5	698.5	672.1	661.9
50°	686.6	686.6	656.6	630.3	622.9
52.5°	647.6	646.2	617.7	591.3	581.0
55°	589.3	587.4	559.3	533.0	525.7
57.5°	527.5	527.5	501.4	473.1	465.1
60°	490.1	490.1	463.9	435.6	424.7
62.5°	449.7	448.3	422.0	396.8	390.2
65°	392.8	389.2	364.8	342.2	336.7
67.5°	338.6	334.9	309.0	291.0	287.3
70°	301.2	297.5	273.1	258.1	254.4
72.5°	265.3	260.1	238.7	226.6	223.0
75°	213.3	205.9	188.9	181.4	179.6
77.5°	163.9	151.4	144.4	139.1	137.3
80°	130.9	120.0	116.0	112.2	110.4
82.5°	102.5	91.5	90.5	88.3	86.4
85°	61.7	54.4	54.3	52.3	50.5
87.5°	26.9	23.1	23.6	23.4	23.4
90°	7.5	10.3	13.3	12.4	12.4
92.5°	15.9	12.9	12.7	14.1	13.5
95°	23.1	22.7	13.7	14.7	14.9
97.5°	27.5	36.5	64.9	20.9	17.1
100°	32.4	43.7	123.5	37.1	25.2
102.5°	35.7	47.9	165.7	94.8	51.3
105°	40.8	54.0	187.4	236.4	155.2
107.5°	47.7	57.1	179.0	343.2	319.8
110°	51.1	61.2	174.2	360.6	385.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	56.0	66.1	169.3	350.4	393.6
115°	61.4	71.5	160.1	328.9	384.5
117.5°	68.9	78.8	158.3	307.7	364.8
120°	74.6	83.7	155.1	291.5	351.0
122.5°	77.2	88.5	151.0	277.6	332.3
125°	83.9	94.8	151.0	260.8	308.4
127.5°	87.9	100.5	151.2	241.3	288.3
130°	91.1	103.1	152.0	228.3	272.9
132.5°	93.7	105.6	150.5	222.4	259.1
135°	99.4	110.3	150.1	214.8	246.5
137.5°	104.5	116.2	150.1	206.4	233.5
140°	108.6	119.5	150.1	201.4	226.2
142.5°	112.6	122.7	151.0	195.7	218.9
145°	117.7	127.6	151.2	187.1	207.0
147.5°	123.8	132.5	152.4	180.9	196.2
150°	127.8	135.8	153.2	176.8	189.7
152.5°	131.9	139.0	153.2	173.5	184.0
155°	138.0	142.9	154.2	169.6	177.5
157.5°	142.8	147.6	155.4	167.1	172.9
160°	146.1	150.1	156.2	165.5	170.4
162.5°	148.5	152.5	157.0	164.6	168.0
165°	153.2	155.2	158.3	162.4	165.4
167.5°	155.8	157.6	159.3	161.3	163.1
170°	158.3	159.3	159.3	161.3	162.3
172.5°	159.1	160.9	160.1	160.5	161.5
175°	161.3	162.3	161.3	160.3	159.3
177.5°	161.3	162.1	161.3	161.3	160.5
180°	161.3	161.3	161.3	161.3	161.3

(END OF REPORT)