

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: P644587

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

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644587
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-100D25U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

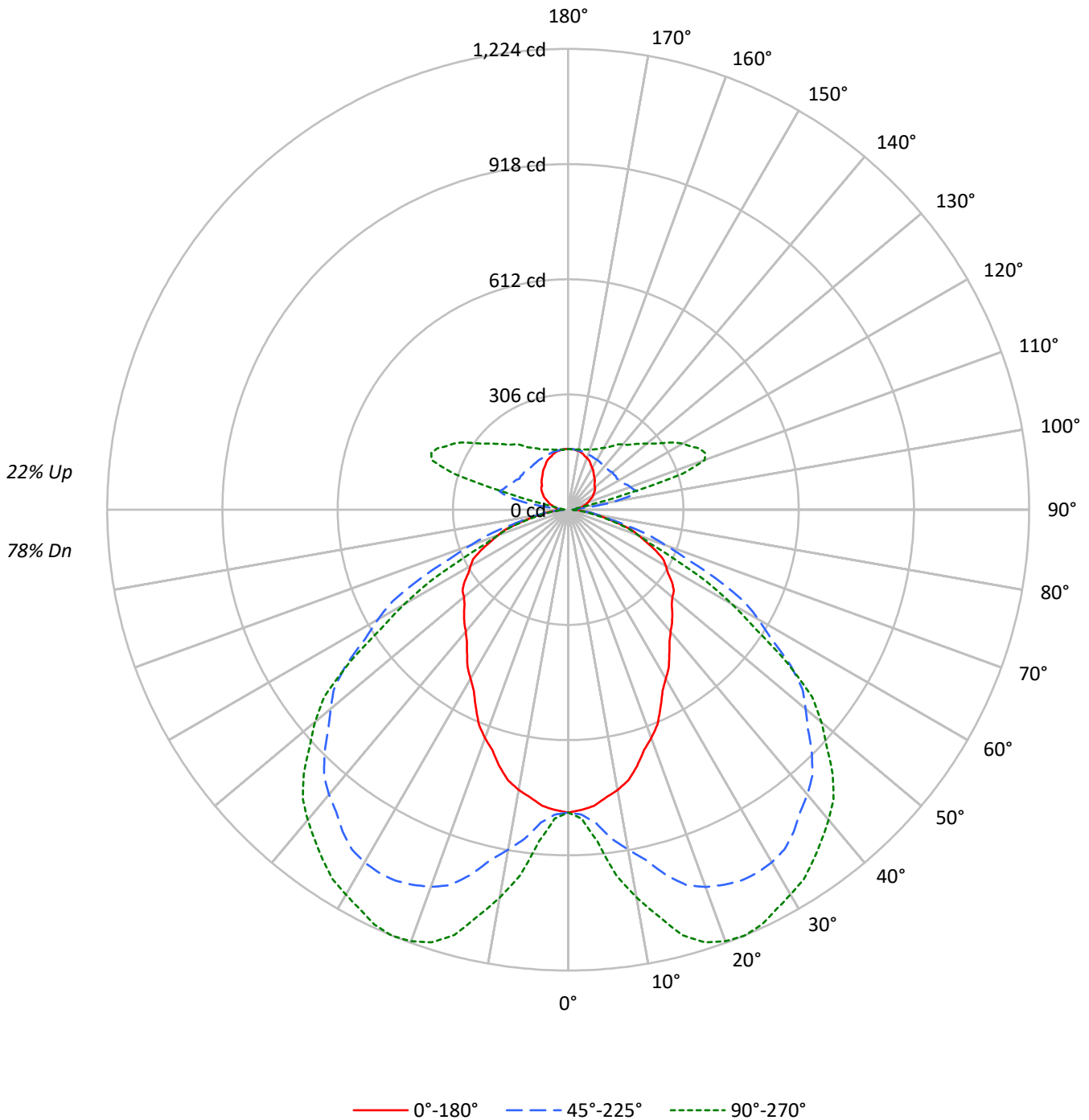
Lumens per Lamp: N/A
Luminaire Lumens: 3978.0 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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			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	114	114	114	114	108	108	108	108	99	99	99	90	90	90	81	81	81	78
1	104	100	96	92	99	95	92	89	87	84	82	79	77	75	72	71	69	66
2	95	87	81	75	90	83	78	73	76	72	68	70	66	63	64	61	58	55
3	86	76	69	63	82	73	66	61	67	61	57	61	57	53	56	53	49	46
4	79	68	59	53	75	65	57	51	60	53	48	55	49	45	50	46	42	39
5	72	60	52	45	69	58	50	44	53	47	41	49	43	39	45	40	37	34
6	67	54	45	39	63	52	44	38	48	41	36	44	38	34	41	36	32	30
7	62	49	40	34	59	47	39	33	43	37	32	40	34	30	37	32	28	26
8	57	44	36	30	54	43	35	30	39	33	28	36	31	27	34	29	25	23
9	53	40	32	27	51	39	31	26	36	30	25	33	28	24	31	26	23	21
10	50	37	29	24	47	36	28	24	33	27	23	31	25	21	29	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12988	12988	12988
5°	12794	13522	14311
10°	12391	15028	17144
15°	11789	16792	19544
20°	11089	18321	20957
25°	10331	19363	21663
30°	9661	20159	22007
35°	9219	20576	22381
40°	8911	20818	22672
45°	8928	20888	22681
50°	9068	20675	22039
55°	9478	20273	20011
60°	9665	18849	16249
65°	9792	16508	11935
70°	9361	12982	9272
75°	8403	9688	7817
80°	7132	7652	6258
85°	6928	6243	5206

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 22681 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	2.1
10°-20°	274.2	6.9
20°-30°	455.5	11.4
30°-40°	574.6	14.4
40°-50°	614.2	15.4
50°-60°	542.1	13.6
60°-70°	347.9	8.7
70°-80°	154.3	3.9
80°-90°	40.4	1.0
90°-100°	30.3	0.8
100°-110°	148.0	3.7
110°-120°	197.0	5.0
120°-130°	159.4	4.0
130°-140°	125.9	3.2
140°-150°	99.0	2.5
150°-160°	72.4	1.8
160°-170°	45.0	1.1
170°-180°	15.3	0.4
0°-30°	812.1	20.4
0°-40°	1386.7	34.9
0°-60°	2543.1	63.9
0°-90°	3085.6	77.6
90°-120°	375.4	9.4
90°-150°	759.7	19.1
90°-180°	892.0	22.4
0°-180°	3978.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	789	813	834	863	883	74
15°	705	813	1005	1125	1169	198
25°	580	787	1087	1188	1216	267
35°	468	718	1044	1112	1136	294
45°	391	614	915	971	993	302
55°	337	483	720	724	711	299
65°	256	324	432	351	312	251
75°	135	149	155	133	125	144
85°	37	32	34	30	28	40
90°	13	14	13	14	10	9
95°	29	28	18	15	15	24
105°	44	60	189	236	155	48
115°	65	75	164	331	384	65
125°	86	97	155	263	308	76
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°	804.4	804.4	804.4	804.4	804.4
2.5°	798.4	810.1	810.4	815.0	820.9
5°	789.4	813.2	834.3	862.9	883.0
7.5°	770.7	813.2	880.7	947.0	979.9
10°	755.8	814.3	916.6	1005.5	1045.7
12.5°	736.3	813.9	952.6	1059.5	1105.6
15°	705.3	813.2	1004.6	1125.3	1169.2
17.5°	669.3	809.8	1045.4	1166.3	1204.7
20°	645.4	806.4	1066.3	1181.3	1219.7
22.5°	618.5	798.4	1078.3	1188.7	1224.2
25°	579.9	786.6	1086.9	1188.5	1216.0
27.5°	542.1	769.7	1087.3	1173.5	1196.9
30°	518.2	756.0	1081.3	1158.5	1180.4
32.5°	497.2	740.9	1069.3	1140.5	1164.0
35°	467.7	718.3	1043.9	1111.7	1135.5
37.5°	442.2	692.5	1011.7	1077.8	1105.6
40°	422.8	671.5	987.7	1053.7	1075.7
42.5°	407.8	649.3	959.3	1023.7	1042.7
45°	391.0	614.1	914.8	971.4	993.3
47.5°	373.0	577.9	863.5	917.0	931.2
50°	361.0	551.3	823.1	871.9	877.4
52.5°	353.6	523.3	784.2	814.9	816.0
55°	336.7	483.1	720.2	723.7	710.9
57.5°	314.3	436.1	639.0	620.8	590.0
60°	299.3	403.6	583.7	547.1	503.2
62.5°	284.3	372.5	525.3	466.1	414.9
65°	256.3	324.0	432.1	350.8	312.4
67.5°	223.7	270.6	339.3	262.4	236.8
70°	198.3	234.9	275.0	214.7	196.4
72.5°	174.3	199.2	222.6	177.5	168.0
75°	134.7	149.3	155.3	132.7	125.3
77.5°	99.1	99.9	107.8	93.5	89.8
80°	76.7	73.0	82.3	71.0	67.3
82.5°	58.7	53.6	59.9	51.6	49.4
85°	37.4	31.9	33.7	29.9	28.1
87.5°	22.1	17.9	17.6	16.3	14.1
90°	13.1	14.1	13.3	14.2	10.5
92.5°	20.0	16.6	14.2	14.5	11.6
95°	28.7	28.3	17.5	14.7	14.9
97.5°	32.7	41.7	66.8	21.3	17.1
100°	36.1	47.5	125.3	38.9	25.2
102.5°	39.5	53.1	167.5	95.2	51.3
105°	44.5	59.6	189.2	236.4	155.2
107.5°	51.5	60.9	180.9	343.2	319.8
110°	54.8	64.9	176.0	360.6	385.5



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CATALOG NUMBER: OMN4DIP-SR4F0-100D25U930-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	59.7	69.8	171.2	350.4	393.6
115°	65.2	75.2	163.9	330.8	384.5
117.5°	72.3	82.5	162.0	309.5	364.8
120°	76.5	87.4	158.8	293.3	351.0
122.5°	80.5	90.8	153.2	279.4	332.3
125°	85.8	96.7	154.7	262.6	308.4
127.5°	89.8	102.3	153.1	242.8	288.3
130°	93.0	104.9	153.9	228.3	272.9
132.5°	94.1	106.0	150.9	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)