

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: P644578

Luminaire Tested: OMN4DIP-SR4F0-100D25U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644578
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-SR4F0-100D25U835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

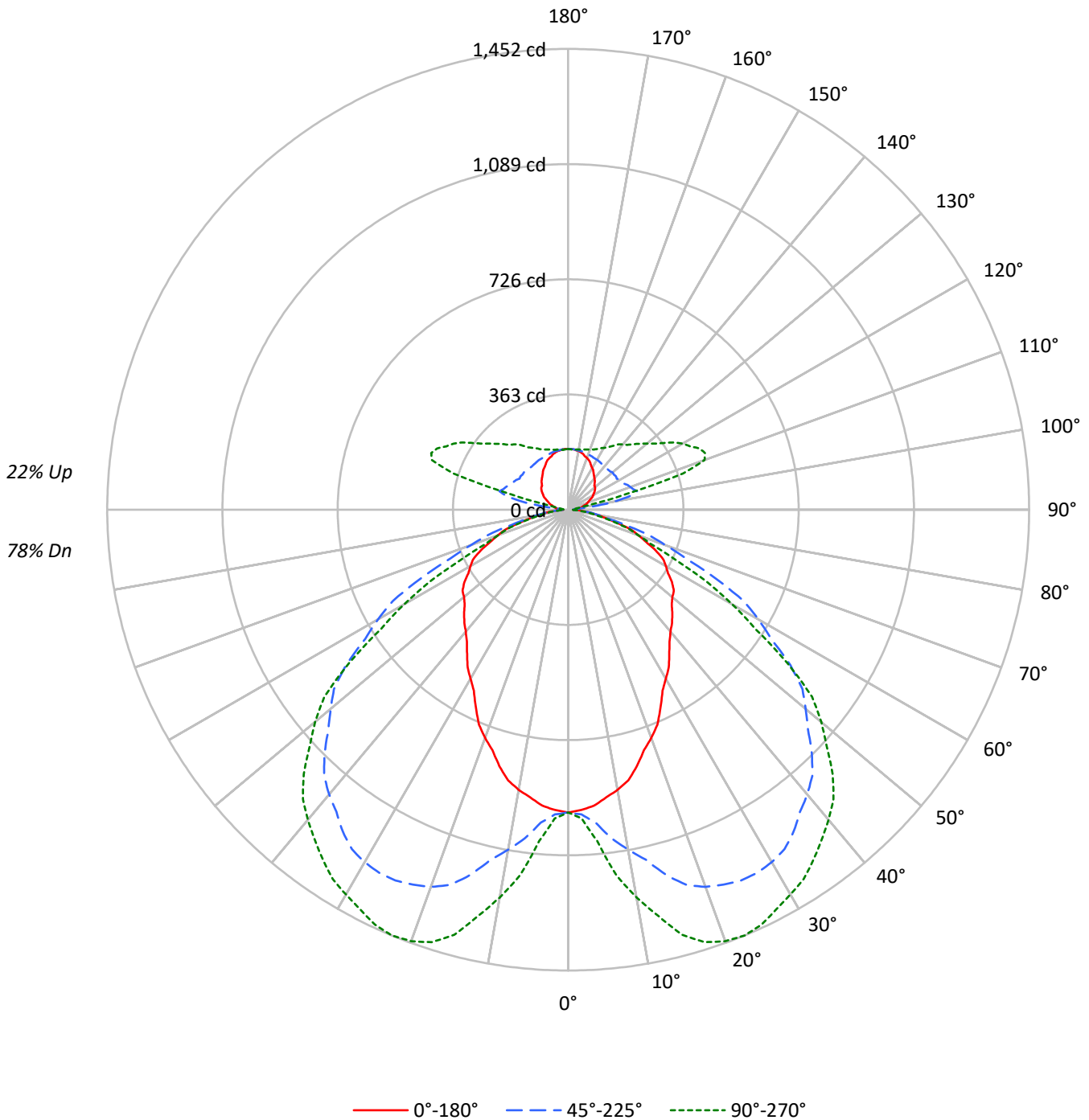
Lumens per Lamp: N/A
Luminaire Lumens: 4717.8 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	
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°	15403	15403	15403
5°	15175	16037	16973
10°	14695	17823	20333
15°	13981	19915	23178
20°	13151	21728	24854
25°	12253	22963	25691
30°	11458	23909	26099
35°	10933	24402	26544
40°	10568	24689	26888
45°	10588	24772	26900
50°	10756	24521	26136
55°	11240	24045	23733
60°	11464	22352	19272
65°	11610	19580	14155
70°	11103	15394	10999
75°	9963	11485	9270
80°	8461	9075	7429
85°	8225	7392	6169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 26900 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	2.1
10°-20°	325.1	6.9
20°-30°	540.2	11.4
30°-40°	681.4	14.4
40°-50°	728.4	15.4
50°-60°	642.9	13.6
60°-70°	412.6	8.7
70°-80°	183.0	3.9
80°-90°	47.9	1.0
90°-100°	36.0	0.8
100°-110°	175.6	3.7
110°-120°	233.6	5.0
120°-130°	189.1	4.0
130°-140°	149.4	3.2
140°-150°	117.4	2.5
150°-160°	85.9	1.8
160°-170°	53.3	1.1
170°-180°	18.2	0.4
0°-30°	963.2	20.4
0°-40°	1644.6	34.9
0°-60°	3016.0	63.9
0°-90°	3659.5	77.6
90°-120°	445.2	9.4
90°-150°	901.0	19.1
90°-180°	1058.0	22.4
0°-180°	4717.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	936	964	990	1023	1047	88
15°	836	964	1191	1335	1387	234
25°	688	933	1289	1410	1442	317
35°	555	852	1238	1318	1347	348
45°	464	728	1085	1152	1178	358
55°	399	573	854	858	843	354
65°	304	384	512	416	370	297
75°	160	177	184	157	149	171
85°	44	38	40	35	33	47
90°	16	17	16	17	12	11
95°	34	34	21	18	18	29
105°	53	71	224	280	184	57
115°	77	89	194	392	456	77
125°	102	115	184	312	366	90
135°	118	131	178	255	292	91
145°	140	151	179	222	245	88
155°	164	170	183	201	211	75
165°	182	184	188	193	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	954.0	954.0	954.0	954.0	954.0
2.5°	946.9	960.8	961.1	966.6	973.5
5°	936.3	964.5	989.5	1023.3	1047.2
7.5°	914.1	964.4	1044.5	1123.1	1162.1
10°	896.3	965.7	1087.1	1192.5	1240.2
12.5°	873.2	965.2	1129.7	1256.5	1311.2
15°	836.4	964.4	1191.4	1334.6	1386.6
17.5°	793.8	960.4	1239.8	1383.2	1428.8
20°	765.4	956.3	1264.6	1401.0	1446.5
22.5°	733.5	946.9	1278.8	1409.8	1451.9
25°	687.8	932.9	1289.0	1409.6	1442.1
27.5°	643.0	912.8	1289.5	1391.7	1419.5
30°	614.6	896.6	1282.4	1373.9	1399.9
32.5°	589.7	878.7	1268.2	1352.6	1380.4
35°	554.7	851.8	1238.0	1318.5	1346.7
37.5°	524.5	821.2	1199.8	1278.2	1311.2
40°	501.4	796.4	1171.4	1249.7	1275.7
42.5°	483.7	770.0	1137.7	1214.1	1236.6
45°	463.7	728.3	1084.9	1152.0	1178.1
47.5°	442.4	685.4	1024.1	1087.5	1104.4
50°	428.2	653.8	976.2	1034.0	1040.5
52.5°	419.3	620.6	930.0	966.5	967.8
55°	399.3	572.9	854.2	858.3	843.1
57.5°	372.7	517.2	757.9	736.2	699.7
60°	355.0	478.6	692.2	648.9	596.8
62.5°	337.2	441.8	623.0	552.8	492.1
65°	303.9	384.2	512.5	416.1	370.5
67.5°	265.3	320.9	402.5	311.2	280.9
70°	235.2	278.6	326.1	254.6	233.0
72.5°	206.8	236.3	264.0	210.5	199.2
75°	159.7	177.1	184.1	157.3	148.6
77.5°	117.6	118.5	127.8	110.8	106.5
80°	91.0	86.6	97.6	84.2	79.9
82.5°	69.7	63.6	71.0	61.2	58.6
85°	44.4	37.9	39.9	35.4	33.3
87.5°	26.2	21.2	20.9	19.3	16.7
90°	15.5	16.7	15.7	16.8	12.5
92.5°	23.7	19.7	16.8	17.1	13.7
95°	34.0	33.6	20.7	17.5	17.7
97.5°	38.8	49.5	79.2	25.3	20.3
100°	42.8	56.3	148.6	46.2	29.9
102.5°	46.8	63.0	198.7	112.9	60.8
105°	52.8	70.7	224.4	280.4	184.1
107.5°	61.0	72.2	214.6	407.1	379.2
110°	65.0	77.0	208.8	427.6	457.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	70.8	82.8	203.0	415.6	466.8
115°	77.3	89.2	194.3	392.3	456.0
117.5°	85.7	97.9	192.2	367.1	432.7
120°	90.7	103.6	188.3	347.9	416.3
122.5°	95.5	107.6	181.7	331.4	394.2
125°	101.7	114.6	183.5	311.5	365.8
127.5°	106.5	121.4	181.5	287.9	341.9
130°	110.3	124.4	182.5	270.7	323.7
132.5°	111.6	125.7	179.0	263.8	307.3
135°	117.9	130.9	178.1	254.7	292.4
137.5°	123.9	137.8	178.1	244.7	277.0
140°	128.7	141.7	178.1	238.9	268.3
142.5°	133.6	145.6	179.0	232.1	259.6
145°	139.6	151.3	179.3	221.9	245.4
147.5°	146.8	157.1	180.7	214.6	232.7
150°	151.6	161.0	181.7	209.7	225.0
152.5°	156.4	164.9	181.7	205.8	218.3
155°	163.6	169.5	182.9	201.1	210.6
157.5°	169.4	175.1	184.3	198.2	205.0
160°	173.3	178.0	185.3	196.2	202.1
162.5°	176.1	180.8	186.3	195.2	199.2
165°	181.7	184.0	187.7	192.6	196.1
167.5°	184.8	186.9	188.9	191.4	193.5
170°	187.7	188.9	188.9	191.3	192.5
172.5°	188.7	190.8	189.9	190.4	191.5
175°	191.3	192.5	191.3	190.1	188.9
177.5°	191.3	192.2	191.3	191.3	190.3
180°	191.3	191.3	191.3	191.3	191.3

(END OF REPORT)