

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: P644582

Luminaire Tested: OMN4DIP-SR4F0-100D25U840-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644582
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-SR4F0-100D25U840-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDE LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

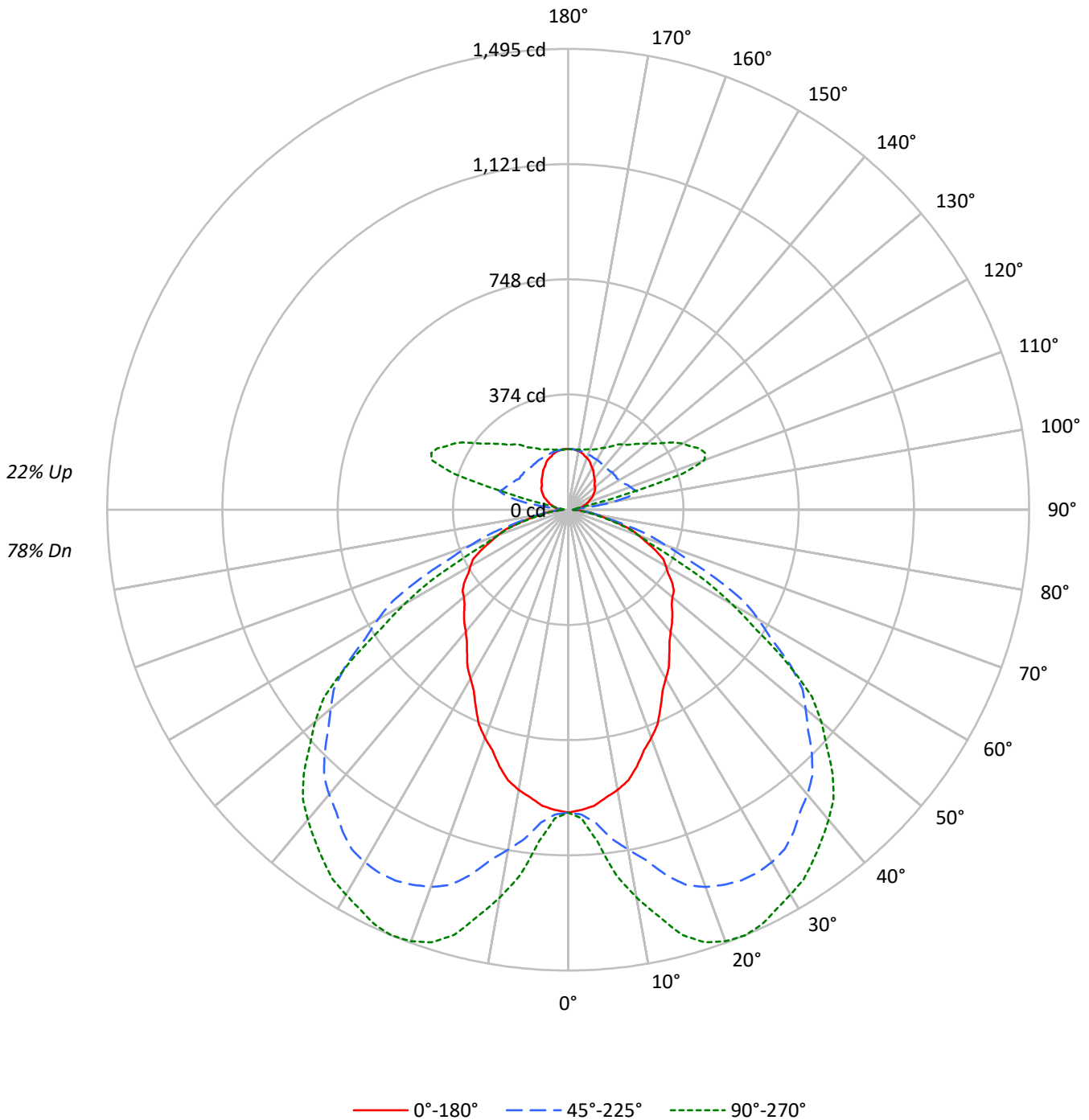
Lumens per Lamp: N/A
Luminaire Lumens: 4858.5 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	15862	15862	15862
5°	15627	16515	17478
10°	15133	18354	20940
15°	14397	20508	23870
20°	13543	22376	25596
25°	12618	23648	26457
30°	11800	24621	26878
35°	11259	25129	27334
40°	10884	25425	27689
45°	10903	25510	27702
50°	11077	25252	26914
55°	11578	24760	24439
60°	11806	23018	19846
65°	11958	20164	14579
70°	11434	15857	11325
75°	10262	11828	9551
80°	8712	9345	7652
85°	8466	7614	6354

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 27702 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.8	2.1
10°-20°	334.8	6.9
20°-30°	556.3	11.4
30°-40°	701.7	14.4
40°-50°	750.2	15.4
50°-60°	662.1	13.6
60°-70°	425.0	8.7
70°-80°	188.4	3.9
80°-90°	49.3	1.0
90°-100°	37.1	0.8
100°-110°	180.8	3.7
110°-120°	240.6	5.0
120°-130°	194.7	4.0
130°-140°	153.8	3.2
140°-150°	120.9	2.5
150°-160°	88.4	1.8
160°-170°	54.9	1.1
170°-180°	18.7	0.4
0°-30°	991.9	20.4
0°-40°	1693.6	34.9
0°-60°	3105.9	63.9
0°-90°	3768.6	77.6
90°-120°	458.5	9.4
90°-150°	927.9	19.1
90°-180°	1090.0	22.4
0°-180°	4858.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	964	993	1019	1054	1078	91
15°	861	993	1227	1374	1428	241
25°	708	961	1327	1452	1485	326
35°	571	877	1275	1358	1387	359
45°	478	750	1117	1186	1213	369
55°	411	590	880	884	868	365
65°	313	396	528	428	382	306
75°	164	182	190	162	153	176
85°	46	39	41	36	34	48
90°	16	17	16	17	13	11
95°	35	35	21	18	18	30
105°	54	73	231	289	190	58
115°	80	92	200	404	470	79
125°	105	118	189	321	377	93
135°	121	135	183	262	301	94
145°	144	156	185	228	253	90
155°	168	175	188	207	217	77
165°	187	190	193	198	202	53
175°	197	198	197	196	194	19
180°	197	197	197	197	197	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	982.4	982.4	982.4	982.4	982.4
2.5°	975.1	989.4	989.8	995.4	1002.5
5°	964.2	993.2	1019.0	1053.8	1078.4
7.5°	941.3	993.1	1075.7	1156.5	1196.7
10°	923.0	994.5	1119.5	1228.0	1277.2
12.5°	899.3	994.0	1163.4	1294.0	1350.3
15°	861.3	993.2	1226.9	1374.4	1428.0
17.5°	817.5	989.1	1276.7	1424.5	1471.4
20°	788.2	984.8	1302.3	1442.7	1489.7
22.5°	755.3	975.2	1316.9	1451.8	1495.1
25°	708.3	960.7	1327.4	1451.6	1485.1
27.5°	662.1	940.0	1327.9	1433.2	1461.8
30°	632.9	923.3	1320.6	1414.9	1441.7
32.5°	607.3	904.9	1306.0	1393.0	1421.6
35°	571.2	877.2	1274.9	1357.8	1386.8
37.5°	540.1	845.7	1235.6	1316.3	1350.3
40°	516.4	820.2	1206.3	1286.9	1313.7
42.5°	498.1	793.0	1171.6	1250.3	1273.5
45°	477.5	750.1	1117.2	1186.4	1213.2
47.5°	455.6	705.8	1054.6	1119.9	1137.3
50°	441.0	673.3	1005.3	1064.8	1071.5
52.5°	431.8	639.1	957.8	995.3	996.6
55°	411.3	590.0	879.6	883.8	868.2
57.5°	383.8	532.6	780.5	758.1	720.6
60°	365.6	492.9	712.8	668.2	614.6
62.5°	347.3	455.0	641.6	569.3	506.8
65°	313.0	395.7	527.8	428.5	381.6
67.5°	273.3	330.4	414.5	320.5	289.2
70°	242.2	286.9	335.9	262.2	239.9
72.5°	212.9	243.3	271.9	216.8	205.2
75°	164.5	182.4	189.6	162.0	153.1
77.5°	121.1	122.0	131.6	114.1	109.7
80°	93.7	89.2	100.5	86.7	82.3
82.5°	71.7	65.5	73.1	63.0	60.3
85°	45.7	39.0	41.1	36.5	34.3
87.5°	27.0	21.8	21.5	19.9	17.2
90°	16.0	17.2	16.2	17.3	12.9
92.5°	24.5	20.3	17.3	17.7	14.2
95°	35.0	34.6	21.3	18.0	18.2
97.5°	40.0	51.0	81.5	26.0	20.9
100°	44.1	58.0	153.1	47.6	30.8
102.5°	48.2	64.9	204.6	116.3	62.7
105°	54.4	72.8	231.1	288.7	189.6
107.5°	62.9	74.4	221.0	419.2	390.5
110°	67.0	79.3	215.0	440.4	470.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	72.9	85.2	209.1	428.0	480.7
115°	79.6	91.9	200.1	404.0	469.6
117.5°	88.3	100.8	197.9	378.0	445.6
120°	93.4	106.7	193.9	358.3	428.7
122.5°	98.3	110.9	187.2	341.3	405.9
125°	104.7	118.1	189.0	320.7	376.7
127.5°	109.6	125.0	187.0	296.5	352.1
130°	113.6	128.1	187.9	278.8	333.3
132.5°	114.9	129.4	184.3	271.6	316.4
135°	121.4	134.8	183.4	262.3	301.1
137.5°	127.6	141.9	183.4	252.0	285.2
140°	132.6	145.9	183.4	246.0	276.3
142.5°	137.5	149.9	184.4	239.0	267.4
145°	143.7	155.8	184.6	228.5	252.8
147.5°	151.2	161.8	186.1	221.0	239.6
150°	156.1	165.8	187.1	216.0	231.7
152.5°	161.1	169.8	187.1	211.9	224.8
155°	168.5	174.6	188.3	207.1	216.8
157.5°	174.5	180.3	189.8	204.1	211.1
160°	178.4	183.3	190.8	202.1	208.2
162.5°	181.4	186.2	191.8	201.1	205.2
165°	187.1	189.5	193.3	198.3	202.0
167.5°	190.3	192.5	194.5	197.1	199.2
170°	193.3	194.5	194.5	197.0	198.2
172.5°	194.3	196.5	195.5	196.0	197.3
175°	197.0	198.2	197.0	195.7	194.5
177.5°	197.0	198.0	197.0	197.0	196.0
180°	197.0	197.0	197.0	197.0	197.0

(END OF REPORT)