

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: P644539

Luminaire Tested: OMN4DIP-SR4F0-100D125U940-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644539
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-SR4F0-100D125U940-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

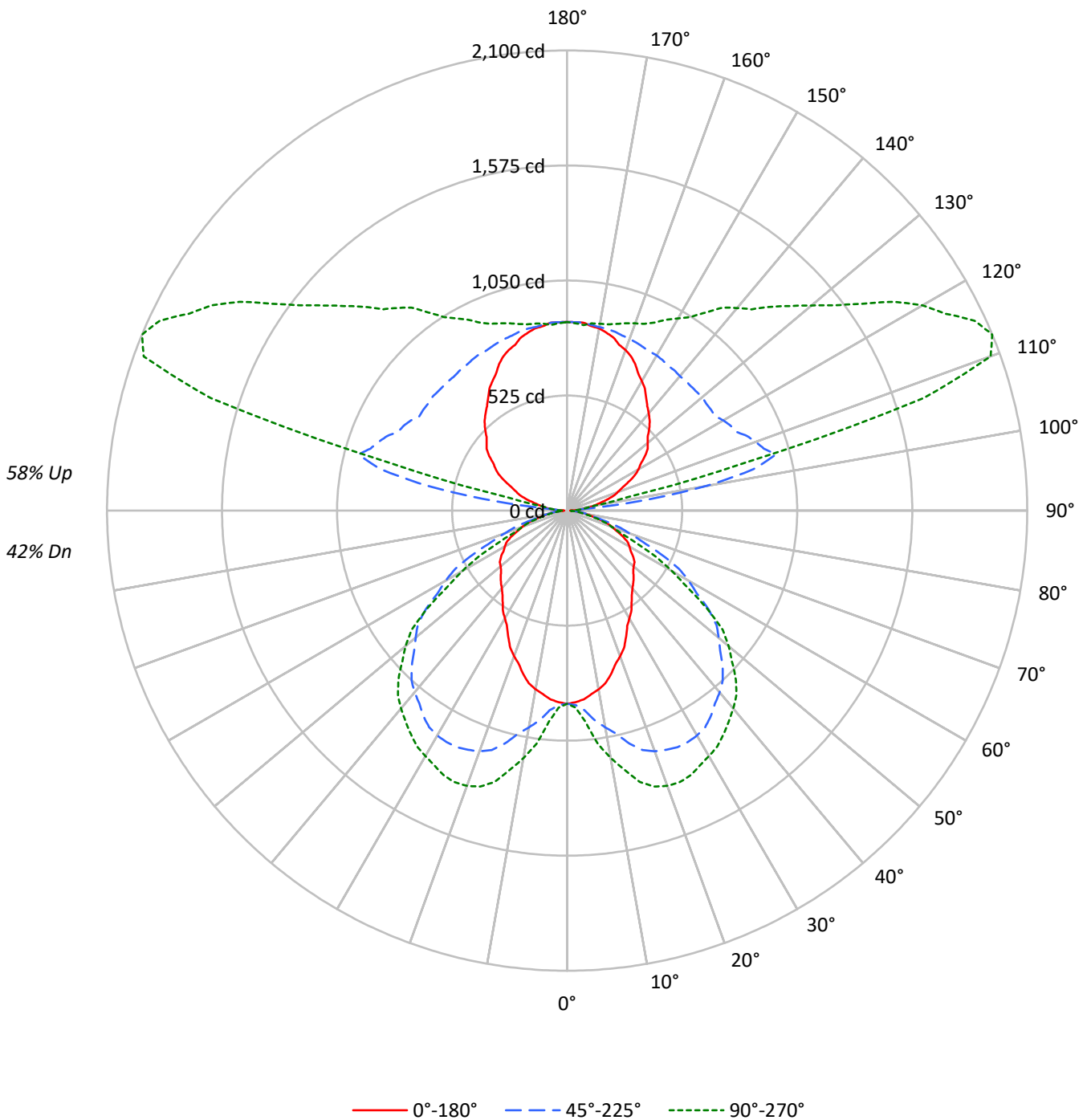
Lumens per Lamp: N/A
Luminaire Lumens: 8034.0 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.1
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	65	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25	21
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14236	14236	14236
5°	14024	14822	15686
10°	13580	16472	18792
15°	12921	18404	21421
20°	12155	20081	22969
25°	11323	21223	23742
30°	10590	22095	24121
35°	10104	22551	24532
40°	9767	22818	24850
45°	9784	22893	24859
50°	9939	22662	24154
55°	10390	22221	21931
60°	10595	20657	17809
65°	10732	18094	13081
70°	10258	14228	10164
75°	9208	10618	8571
80°	7820	8387	6862
85°	7595	6836	5706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 24859 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	1.1
10°-20°	300.5	3.7
20°-30°	499.2	6.2
30°-40°	629.8	7.8
40°-50°	673.2	8.4
50°-60°	594.2	7.4
60°-70°	381.3	4.7
70°-80°	169.1	2.1
80°-90°	45.8	0.6
90°-100°	117.3	1.5
100°-110°	761.3	9.5
110°-120°	1029.0	12.8
120°-130°	836.6	10.4
130°-140°	670.3	8.3
140°-150°	528.2	6.6
150°-160°	386.2	4.8
160°-170°	239.9	3.0
170°-180°	81.8	1.0
0°-30°	890.1	11.1
0°-40°	1519.9	18.9
0°-60°	2787.3	34.7
0°-90°	3383.5	42.1
90°-120°	1907.6	23.7
90°-150°	3942.7	49.1
90°-180°	4651.0	57.9
0°-180°	8034.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	865	891	914	946	968	81
15°	773	891	1101	1233	1282	216
25°	636	862	1191	1303	1333	293
35°	513	787	1144	1218	1245	322
45°	428	673	1003	1065	1089	331
55°	369	530	789	793	779	327
65°	281	355	474	384	342	275
75°	148	164	170	145	137	158
85°	41	35	37	33	31	43
90°	14	20	23	28	24	12
95°	66	95	54	55	64	65
105°	182	270	986	1253	828	193
115°	308	369	850	1757	2051	306
125°	434	492	802	1393	1645	385
135°	530	588	801	1146	1315	409
145°	628	681	806	998	1104	394
155°	736	762	823	905	947	338
165°	817	828	844	866	882	229
175°	860	866	860	855	850	81
180°	860	860	860	860	860	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	881.7	881.7	881.7	881.7	881.7
2.5°	875.1	887.9	888.2	893.3	899.7
5°	865.3	891.3	914.5	945.7	967.8
7.5°	844.8	891.3	965.3	1037.9	1074.0
10°	828.3	892.5	1004.7	1102.0	1146.2
12.5°	807.0	892.0	1044.0	1161.2	1211.8
15°	773.0	891.3	1101.0	1233.4	1281.5
17.5°	733.6	887.6	1145.7	1278.3	1320.4
20°	707.4	883.8	1168.7	1294.7	1336.8
22.5°	677.9	875.1	1181.8	1302.9	1341.8
25°	635.6	862.2	1191.3	1302.7	1332.7
27.5°	594.2	843.6	1191.7	1286.2	1311.8
30°	568.0	828.6	1185.1	1269.7	1293.8
32.5°	545.0	812.0	1172.0	1250.1	1275.7
35°	512.6	787.2	1144.1	1218.5	1244.6
37.5°	484.7	759.0	1108.8	1181.3	1211.8
40°	463.4	736.0	1082.6	1154.9	1179.0
42.5°	447.0	711.6	1051.4	1122.0	1142.9
45°	428.5	673.1	1002.6	1064.7	1088.7
47.5°	408.8	633.4	946.4	1005.0	1020.7
50°	395.7	604.2	902.2	955.6	961.6
52.5°	387.5	573.6	859.5	893.2	894.4
55°	369.1	529.5	789.4	793.2	779.1
57.5°	344.5	478.0	700.4	680.4	646.7
60°	328.1	442.3	639.7	599.7	551.5
62.5°	311.7	408.3	575.7	510.9	454.8
65°	280.9	355.1	473.6	384.5	342.4
67.5°	245.2	296.5	371.9	287.6	259.6
70°	217.3	257.4	301.4	235.3	215.3
72.5°	191.1	218.4	244.0	194.5	184.1
75°	147.6	163.7	170.2	145.4	137.4
77.5°	108.7	109.5	118.1	102.4	98.4
80°	84.1	80.1	90.2	77.8	73.8
82.5°	64.4	58.8	65.6	56.5	54.1
85°	41.0	35.0	36.9	32.8	30.8
87.5°	24.2	20.4	21.0	20.4	18.0
90°	14.4	19.6	23.1	28.4	24.4
92.5°	32.3	32.7	34.5	42.6	42.8
95°	65.8	94.9	53.5	55.1	63.6
97.5°	96.9	168.2	326.0	97.9	83.2
100°	121.3	205.2	644.7	192.0	126.5
102.5°	145.6	235.4	869.9	498.4	272.1
105°	182.1	270.1	985.7	1253.3	828.0
107.5°	220.7	284.8	941.3	1823.1	1705.8
110°	245.0	306.5	915.3	1915.6	2056.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	271.0	332.5	889.3	1861.5	2099.7
115°	307.9	369.4	850.4	1756.7	2051.0
117.5°	347.5	408.4	840.6	1643.3	1946.0
120°	376.2	434.4	823.3	1557.0	1872.4
122.5°	397.8	458.7	800.0	1482.8	1772.9
125°	433.7	491.9	801.7	1393.2	1645.1
127.5°	463.0	523.9	800.7	1288.8	1538.0
130°	480.3	543.8	805.0	1217.6	1455.7
132.5°	498.7	562.2	801.7	1186.4	1382.1
135°	530.3	588.5	800.9	1145.7	1315.0
137.5°	557.4	619.8	800.9	1100.8	1245.8
140°	579.0	637.3	800.9	1074.5	1206.8
142.5°	600.7	654.7	805.3	1044.0	1167.8
145°	627.8	680.7	806.3	998.1	1104.0
147.5°	660.2	706.8	812.8	965.1	1046.6
150°	681.9	724.2	817.2	943.2	1012.0
152.5°	703.5	741.6	817.2	925.6	981.7
155°	736.0	762.4	822.6	904.7	947.0
157.5°	762.0	787.4	829.1	891.5	922.1
160°	779.3	800.4	833.4	882.7	909.2
162.5°	792.3	813.4	837.7	878.2	896.2
165°	817.2	827.7	844.2	866.2	882.1
167.5°	831.2	840.8	849.6	860.7	870.2
170°	844.2	849.5	849.6	860.6	865.9
172.5°	848.5	858.1	854.0	856.2	861.5
175°	860.5	865.7	860.5	854.9	849.6
177.5°	860.5	864.7	860.5	860.4	856.1
180°	860.5	860.5	860.5	860.5	860.5

(END OF REPORT)