

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: P645144

Luminaire Tested: OMN4DIP-SR4F0-75D50U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645144
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-SR4F0-75D50U830-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

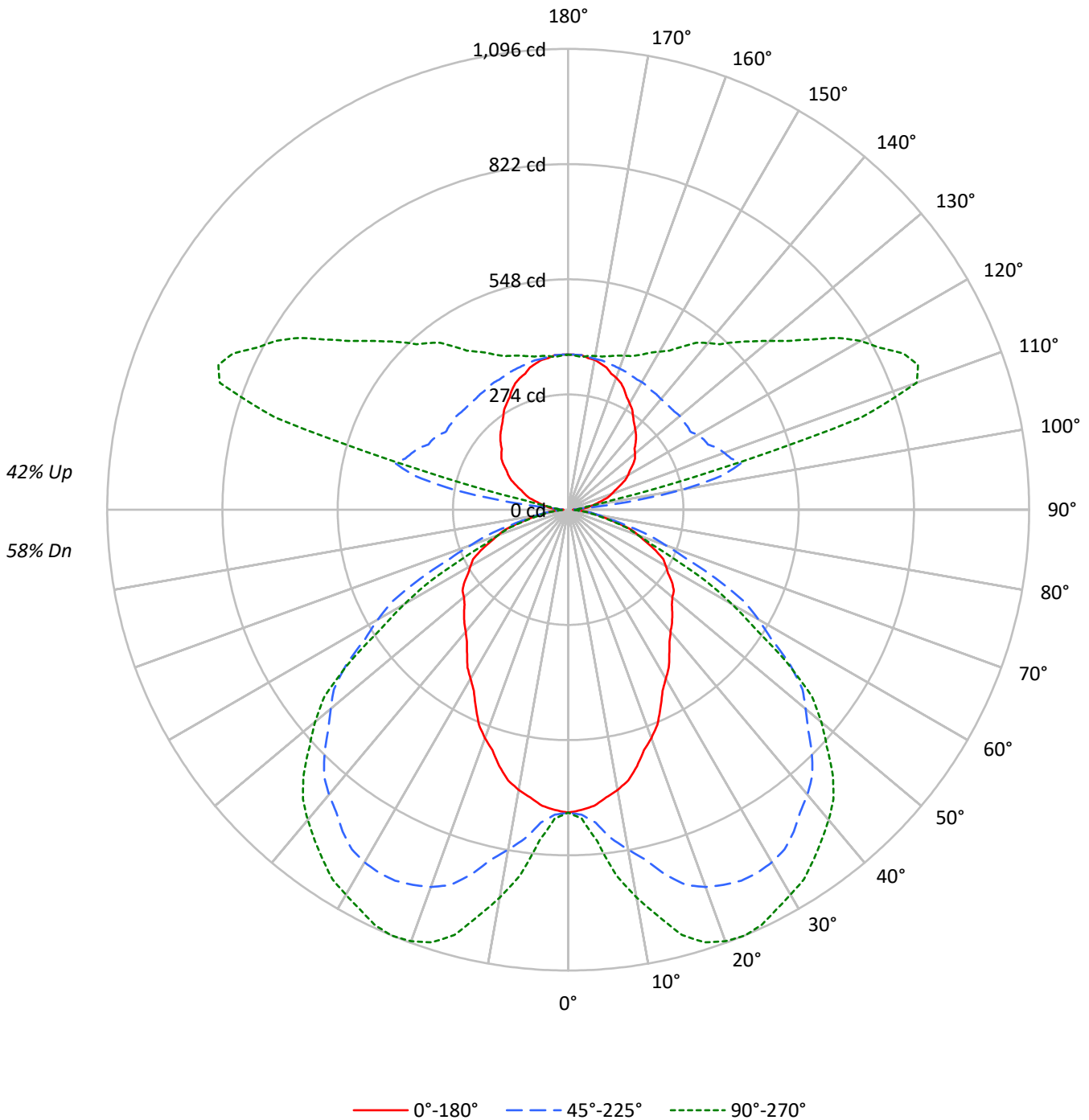
Lumens per Lamp: N/A
Luminaire Lumens: 4768.5 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.4
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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	100	95	91	88	93	89	86	83	77	75	72	66	65	63	56	55	54	49
2	91	83	77	72	84	78	72	68	68	64	60	58	55	52	50	47	45	41
3	83	73	66	60	77	68	62	57	60	54	50	51	47	44	44	41	38	35
4	76	65	57	50	70	60	53	48	53	47	43	46	41	38	39	36	33	30
5	69	57	49	43	64	54	46	41	47	41	37	41	36	32	35	31	28	25
6	64	51	43	37	59	48	41	35	42	36	32	37	32	28	31	28	25	22
7	59	46	38	32	55	43	36	31	38	32	28	33	28	25	29	25	22	19
8	55	42	34	29	51	39	32	27	35	29	25	30	26	22	26	22	19	17
9	51	38	31	25	47	36	29	24	32	26	22	28	23	20	24	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	26	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11631	11631	11631
5°	11459	12110	12817
10°	11096	13459	15354
15°	10557	15039	17503
20°	9931	16407	18768
25°	9253	17341	19400
30°	8652	18053	19708
35°	8255	18425	20044
40°	7980	18645	20303
45°	7994	18705	20313
50°	8121	18515	19736
55°	8490	18156	17920
60°	8657	16879	14554
65°	8768	14785	10690
70°	8384	11627	8304
75°	7523	8677	6999
80°	6388	6853	5607
85°	6206	5595	4650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 20313 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	1.5
10°-20°	245.5	5.1
20°-30°	407.9	8.6
30°-40°	514.6	10.8
40°-50°	550.1	11.5
50°-60°	485.5	10.2
60°-70°	311.6	6.5
70°-80°	138.2	2.9
80°-90°	36.6	0.8
90°-100°	54.8	1.1
100°-110°	329.2	6.9
110°-120°	443.3	9.3
120°-130°	360.0	7.5
130°-140°	287.5	6.0
140°-150°	226.4	4.7
150°-160°	165.6	3.5
160°-170°	102.8	2.2
170°-180°	35.1	0.7
0°-30°	727.3	15.3
0°-40°	1241.9	26.0
0°-60°	2277.4	47.8
0°-90°	2763.8	58.0
90°-120°	827.3	17.3
90°-150°	1701.2	35.7
90°-180°	2005.0	42.0
0°-180°	4768.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	707	728	747	773	791	66
15°	632	728	900	1008	1047	177
25°	519	704	973	1064	1089	239
35°	419	643	935	996	1017	263
45°	350	550	819	870	890	271
55°	302	433	645	648	637	268
65°	230	290	387	314	280	225
75°	121	134	139	119	112	129
85°	34	29	30	27	25	35
90°	12	14	15	17	14	9
95°	37	46	27	26	29	34
105°	84	121	425	538	355	89
115°	136	162	367	754	879	135
125°	188	213	346	598	705	167
135°	227	252	343	491	564	175
145°	269	292	346	428	473	169
155°	316	327	353	388	406	145
165°	350	355	362	371	378	98
175°	369	371	369	366	364	35
180°	369	369	369	369	369	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.4	720.4	720.4	720.4	720.4
2.5°	715.0	725.5	725.8	729.9	735.1
5°	707.0	728.3	747.2	772.7	790.8
7.5°	690.2	728.2	788.7	848.1	877.5
10°	676.8	729.3	820.9	900.5	936.5
12.5°	659.4	728.9	853.1	948.8	990.1
15°	631.6	728.2	899.7	1007.8	1047.1
17.5°	599.4	725.2	936.2	1044.5	1078.9
20°	578.0	722.1	954.9	1057.9	1092.3
22.5°	553.9	715.1	965.7	1064.6	1096.3
25°	519.4	704.5	973.4	1064.4	1089.0
27.5°	485.5	689.3	973.7	1050.9	1071.9
30°	464.1	677.0	968.3	1037.5	1057.1
32.5°	445.3	663.5	957.6	1021.4	1042.4
35°	418.8	643.3	934.8	995.6	1016.9
37.5°	396.0	620.1	906.0	965.2	990.1
40°	378.6	601.4	884.6	943.7	963.3
42.5°	365.2	581.5	859.1	916.8	933.8
45°	350.1	550.0	819.2	869.9	889.6
47.5°	334.1	517.5	773.3	821.2	834.0
50°	323.3	493.7	737.1	780.8	785.7
52.5°	316.6	468.7	702.3	729.8	730.8
55°	301.6	432.6	645.0	648.1	636.6
57.5°	281.5	390.6	572.3	555.9	528.4
60°	268.1	361.4	522.7	490.0	450.7
62.5°	254.7	333.6	470.4	417.5	371.6
65°	229.5	290.1	387.0	314.2	279.8
67.5°	200.4	242.3	303.9	235.0	212.1
70°	177.6	210.3	246.3	192.3	175.9
72.5°	156.1	178.4	199.4	159.0	150.4
75°	120.6	133.7	139.1	118.8	112.2
77.5°	88.8	89.4	96.5	83.7	80.4
80°	68.7	65.4	73.7	63.6	60.3
82.5°	52.6	48.0	53.6	46.2	44.2
85°	33.5	28.6	30.2	26.8	25.1
87.5°	19.8	16.3	16.3	15.4	13.5
90°	11.7	14.0	14.7	16.9	13.7
92.5°	21.3	19.7	18.9	21.7	20.3
95°	37.0	46.3	26.9	26.0	28.9
97.5°	49.4	77.6	142.8	43.6	36.5
100°	59.2	92.8	278.8	83.9	55.0
102.5°	69.0	105.7	375.3	214.6	116.8
105°	83.6	120.6	424.9	538.0	354.9
107.5°	100.0	126.1	405.9	782.3	731.2
110°	109.8	135.4	394.8	822.0	881.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	120.9	146.5	383.6	798.8	900.1
115°	136.0	161.6	366.9	753.8	879.2
117.5°	152.8	178.3	362.8	705.2	834.2
120°	164.5	189.4	355.3	668.2	802.7
122.5°	173.7	199.2	344.7	636.4	760.0
125°	188.3	213.2	346.0	598.0	705.2
127.5°	200.1	226.8	344.8	553.1	659.3
130°	207.5	234.7	346.7	522.0	624.1
132.5°	214.1	241.3	344.0	508.6	592.5
135°	227.3	252.3	343.3	491.1	563.7
137.5°	238.9	265.7	343.3	471.9	534.0
140°	248.2	273.2	343.3	460.6	517.3
142.5°	257.5	280.6	345.2	447.6	500.6
145°	269.1	291.8	345.7	427.9	473.3
147.5°	283.0	303.0	348.4	413.7	448.7
150°	292.3	310.5	350.3	404.3	433.8
152.5°	301.6	317.9	350.3	396.8	420.8
155°	315.5	326.8	352.6	387.8	406.0
157.5°	326.6	337.5	355.4	382.2	395.3
160°	334.1	343.1	357.3	378.4	389.7
162.5°	339.6	348.7	359.1	376.5	384.2
165°	350.3	354.8	361.9	371.3	378.1
167.5°	356.3	360.4	364.2	369.0	373.0
170°	361.9	364.2	364.2	368.9	371.2
172.5°	363.8	367.8	366.1	367.1	369.3
175°	368.9	371.1	368.9	366.5	364.2
177.5°	368.9	370.7	368.9	368.8	367.0
180°	368.9	368.9	368.9	368.9	368.9

(END OF REPORT)