

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: P644983

Luminaire Tested: OMN4DIP-SR4F0-50D50U935-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644983
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-SR4F0-50D50U935-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

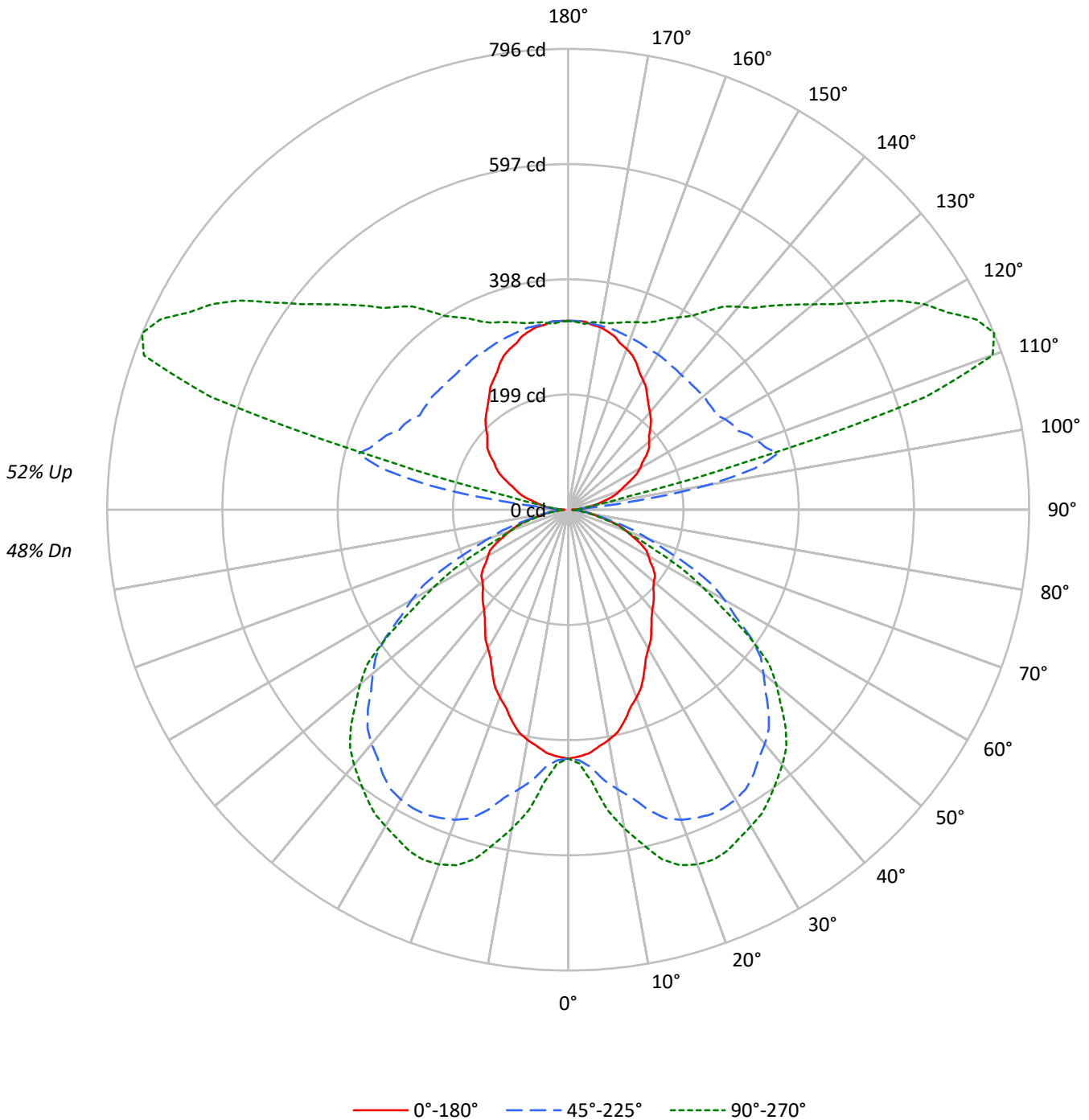
Lumens per Lamp: N/A
Luminaire Lumens: 3416.3 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.9
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

TEST NUMBER: P644983

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U935-CLBOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644983

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U935-CLBOOB-1DUDD-WW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	50	30	10	0														
RCR																																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48						48														
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41						41														
2	89	81	75	70	81	75	70	65	63	60	56	53	50	47	43	41	39	34						34														
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	38	35	33	29						29														
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	31	28	25						25														
5	68	56	48	42	62	52	45	39	44	38	34	37	33	29	30	27	24	21						21														
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18						18														
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16						16														
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14						14														
9	49	37	30	25	45	35	28	23	30	24	20	25	21	18	21	17	15	13						13														
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	12						12														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6943	6943	6943
5°	6840	7229	7650
10°	6624	8034	9165
15°	6302	8976	10447
20°	5928	9794	11203
25°	5523	10350	11580
30°	5164	10776	11764
35°	4928	10998	11964
40°	4763	11129	12119
45°	4772	11166	12125
50°	4848	11052	11781
55°	5067	10838	10697
60°	5167	10075	8686
65°	5234	8825	6380
70°	5004	6939	4957
75°	4492	5178	4180
80°	3812	4091	3347
85°	3705	3335	2779

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12125 cd/sqm



TEST NUMBER: P644983

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U935-CLBOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.1	1.3
10°-20°	146.6	4.3
20°-30°	243.5	7.1
30°-40°	307.1	9.0
40°-50°	328.3	9.6
50°-60°	289.8	8.5
60°-70°	186.0	5.4
70°-80°	82.5	2.4
80°-90°	22.1	0.6
90°-100°	45.7	1.3
100°-110°	289.4	8.5
110°-120°	390.8	11.4
120°-130°	317.6	9.3
130°-140°	254.2	7.4
140°-150°	200.3	5.9
150°-160°	146.4	4.3
160°-170°	90.9	2.7
170°-180°	31.0	0.9
0°-30°	434.1	12.7
0°-40°	741.3	21.7
0°-60°	1359.4	39.8
0°-90°	1650.0	48.3
90°-120°	725.9	21.2
90°-150°	1497.9	43.8
90°-180°	1766.0	51.7
0°-180°	3416.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	430	430	430	430	430	
5°	422	435	446	461	472	40
15°	377	435	537	602	625	106
25°	310	420	581	635	650	143
35°	250	384	558	594	607	157
45°	209	328	489	519	531	161
55°	180	258	385	387	380	160
65°	137	173	231	188	167	134
75°	72	80	83	71	67	77
85°	20	17	18	16	15	21
90°	7	9	10	12	10	5
95°	27	38	21	22	25	27
105°	71	104	374	475	314	75
115°	118	141	323	666	778	117
125°	165	187	305	528	624	147
135°	201	223	304	434	499	155
145°	238	258	306	378	419	149
155°	279	289	312	343	359	128
165°	310	314	320	328	334	87
175°	326	328	326	324	322	31
180°	326	326	326	326	326	

TEST NUMBER: P644983

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U935-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	430.0	430.0	430.0	430.0	430.0
2.5°	426.8	433.1	433.2	435.7	438.8
5°	422.0	434.7	446.0	461.2	472.0
7.5°	412.0	434.7	470.8	506.2	523.8
10°	404.0	435.3	490.0	537.5	559.0
12.5°	393.6	435.1	509.2	566.4	591.0
15°	377.0	434.7	537.0	601.5	625.0
17.5°	357.8	432.9	558.8	623.5	644.0
20°	345.0	431.0	570.0	631.5	652.0
22.5°	330.6	426.8	576.4	635.4	654.4
25°	310.0	420.5	581.0	635.3	650.0
27.5°	289.8	411.4	581.2	627.3	639.8
30°	277.0	404.1	578.0	619.3	631.0
32.5°	265.8	396.0	571.6	609.7	622.2
35°	250.0	384.0	558.0	594.3	607.0
37.5°	236.4	370.2	540.8	576.1	591.0
40°	226.0	359.0	528.0	563.3	575.0
42.5°	218.0	347.1	512.8	547.2	557.4
45°	209.0	328.3	489.0	519.3	531.0
47.5°	199.4	308.9	461.6	490.2	497.8
50°	193.0	294.7	440.0	466.1	469.0
52.5°	189.0	279.7	419.2	435.6	436.2
55°	180.0	258.2	385.0	386.8	380.0
57.5°	168.0	233.1	341.6	331.8	315.4
60°	160.0	215.7	312.0	292.5	269.0
62.5°	152.0	199.1	280.8	249.2	221.8
65°	137.0	173.2	231.0	187.5	167.0
67.5°	119.6	144.6	181.4	140.3	126.6
70°	106.0	125.6	147.0	114.8	105.0
72.5°	93.2	106.5	119.0	94.9	89.8
75°	72.0	79.8	83.0	70.9	67.0
77.5°	53.0	53.4	57.6	50.0	48.0
80°	41.0	39.0	44.0	38.0	36.0
82.5°	31.4	28.7	32.0	27.6	26.4
85°	20.0	17.1	18.0	16.0	15.0
87.5°	11.8	9.9	10.0	9.6	8.4
90°	7.0	9.0	10.1	12.1	10.2
92.5°	14.3	14.0	14.2	17.1	16.8
95°	27.4	37.5	21.4	21.5	24.6
97.5°	38.9	65.3	124.4	37.6	31.8
100°	48.0	79.2	245.1	73.2	48.2
102.5°	57.0	90.6	330.5	189.2	103.2
105°	70.6	103.7	374.4	475.4	313.9
107.5°	85.2	109.1	357.6	691.5	646.7
110°	94.2	117.3	347.7	726.5	779.7



TEST NUMBER: P644983

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U935-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.1	127.2	337.9	706.0	796.1
115°	117.9	140.9	323.1	666.3	777.6
117.5°	132.8	155.7	319.4	623.3	737.8
120°	143.5	165.6	312.8	590.5	709.9
122.5°	151.7	174.6	303.8	562.4	672.2
125°	165.1	187.2	304.6	528.4	623.8
127.5°	176.0	199.2	304.0	488.8	583.1
130°	182.6	206.6	305.7	461.7	551.9
132.5°	189.2	213.2	304.1	449.8	524.0
135°	201.1	223.1	303.7	434.4	498.6
137.5°	211.3	235.0	303.7	417.4	472.3
140°	219.5	241.6	303.7	407.4	457.6
142.5°	227.8	248.2	305.3	395.8	442.8
145°	238.0	258.1	305.7	378.4	418.6
147.5°	250.3	268.0	308.2	365.9	396.8
150°	258.5	274.6	309.8	357.6	383.7
152.5°	266.7	281.2	309.8	350.9	372.2
155°	279.0	289.1	311.9	343.0	359.1
157.5°	288.9	298.5	314.3	338.0	349.6
160°	295.5	303.5	316.0	334.7	344.7
162.5°	300.4	308.4	317.6	333.0	339.8
165°	309.8	313.8	320.1	328.4	334.4
167.5°	315.2	318.8	322.1	326.3	329.9
170°	320.1	322.1	322.1	326.3	328.3
172.5°	321.7	325.3	323.8	324.6	326.7
175°	326.2	328.2	326.2	324.1	322.1
177.5°	326.2	327.8	326.2	326.2	324.6
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)