

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: P644977

Luminaire Tested: OMN4DIP-SR4F0-50D50U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644977
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-SR4F0-50D50U930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

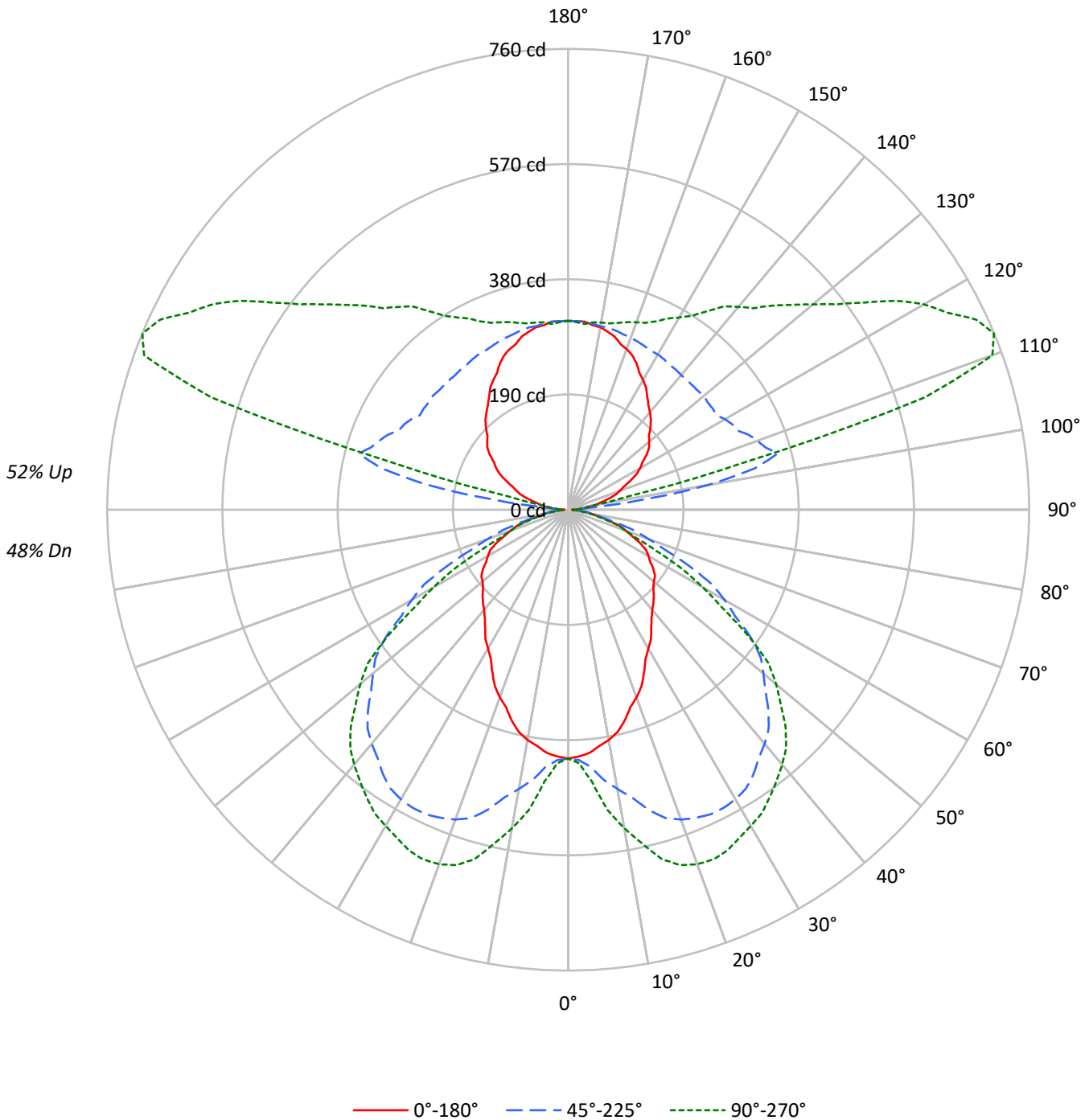
Lumens per Lamp: N/A
Luminaire Lumens: 3259.9 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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: P644977

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U930-CLBOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644977

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U930-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°	6625	6625	6625
5°	6527	6898	7300
10°	6320	7666	8745
15°	6013	8565	9969
20°	5656	9345	10689
25°	5270	9877	11049
30°	4928	10282	11225
35°	4703	10494	11416
40°	4546	10619	11565
45°	4553	10654	11570
50°	4627	10547	11241
55°	4836	10342	10207
60°	4931	9613	8289
65°	4993	8420	6090
70°	4773	6623	4730
75°	4286	4941	3986
80°	3636	3905	3199
85°	3538	3186	2649

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11570 cd/sqm



TEST NUMBER: P644977

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U930-CLBOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	1.3
10°-20°	139.8	4.3
20°-30°	232.3	7.1
30°-40°	293.1	9.0
40°-50°	313.3	9.6
50°-60°	276.5	8.5
60°-70°	177.5	5.4
70°-80°	78.7	2.4
80°-90°	21.1	0.6
90°-100°	43.6	1.3
100°-110°	276.2	8.5
110°-120°	372.9	11.4
120°-130°	303.0	9.3
130°-140°	242.6	7.4
140°-150°	191.1	5.9
150°-160°	139.7	4.3
160°-170°	86.8	2.7
170°-180°	29.6	0.9
0°-30°	414.2	12.7
0°-40°	707.3	21.7
0°-60°	1297.2	39.8
0°-90°	1574.4	48.3
90°-120°	692.7	21.2
90°-150°	1429.4	43.8
90°-180°	1685.0	51.7
0°-180°	3259.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	403	415	426	440	450	38
15°	360	415	512	574	596	101
25°	296	401	554	606	620	136
35°	239	366	532	567	579	150
45°	199	313	467	496	507	154
55°	172	246	367	369	363	152
65°	131	165	220	179	159	128
75°	69	76	79	68	64	73
85°	19	16	17	15	14	20
90°	7	9	10	12	10	5
95°	26	36	20	20	23	25
105°	67	99	357	454	300	71
115°	112	134	308	636	742	112
125°	158	179	291	504	595	140
135°	192	213	290	414	476	148
145°	227	246	292	361	399	143
155°	266	276	298	327	343	122
165°	296	300	305	313	319	83
175°	311	313	311	309	307	29
180°	311	311	311	311	311	

TEST NUMBER: P644977

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U930-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	410.3	410.3	410.3	410.3	410.3
2.5°	407.3	413.2	413.4	415.7	418.7
5°	402.7	414.8	425.6	440.1	450.4
7.5°	393.1	414.8	449.2	483.0	499.8
10°	385.5	415.4	467.6	512.9	533.4
12.5°	375.6	415.1	485.9	540.4	563.9
15°	359.7	414.8	512.4	574.0	596.4
17.5°	341.4	413.1	533.2	594.9	614.5
20°	329.2	411.3	543.9	602.6	622.1
22.5°	315.5	407.3	550.0	606.3	624.4
25°	295.8	401.2	554.4	606.2	620.2
27.5°	276.5	392.6	554.6	598.6	610.5
30°	264.3	385.6	551.5	590.9	602.1
32.5°	253.6	377.9	545.4	581.8	593.7
35°	238.6	366.4	532.4	567.1	579.2
37.5°	225.6	353.2	516.0	549.8	563.9
40°	215.7	342.5	503.8	537.5	548.7
42.5°	208.0	331.2	489.3	522.2	531.9
45°	199.4	313.3	466.6	495.5	506.7
47.5°	190.3	294.8	440.5	467.7	475.0
50°	184.2	281.2	419.9	444.7	447.5
52.5°	180.3	266.9	400.0	415.7	416.2
55°	171.8	246.4	367.4	369.1	362.6
57.5°	160.3	222.4	326.0	316.6	301.0
60°	152.7	205.9	297.7	279.1	256.7
62.5°	145.0	190.0	267.9	237.8	211.6
65°	130.7	165.2	220.4	178.9	159.4
67.5°	114.1	138.0	173.1	133.9	120.8
70°	101.1	119.8	140.3	109.5	100.2
72.5°	88.9	101.6	113.6	90.5	85.7
75°	68.7	76.2	79.2	67.7	63.9
77.5°	50.6	50.9	55.0	47.7	45.8
80°	39.1	37.3	42.0	36.2	34.4
82.5°	30.0	27.3	30.5	26.3	25.2
85°	19.1	16.3	17.2	15.2	14.3
87.5°	11.3	9.4	9.6	9.2	8.0
90°	6.7	8.6	9.6	11.6	9.7
92.5°	13.7	13.3	13.6	16.3	16.0
95°	26.2	35.8	20.4	20.5	23.4
97.5°	37.2	62.3	118.7	35.8	30.3
100°	45.8	75.5	233.9	69.9	46.0
102.5°	54.4	86.4	315.3	180.6	98.5
105°	67.4	99.0	357.2	453.6	299.6
107.5°	81.3	104.1	341.2	659.8	617.1
110°	89.9	112.0	331.8	693.2	744.0



TEST NUMBER: P644977

CATALOG NUMBER: OMN4DIP-SR4F0-50D50U930-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	99.3	121.4	322.4	673.7	759.7
115°	112.5	134.5	308.3	635.8	742.0
117.5°	126.8	148.6	304.8	594.7	704.1
120°	137.0	158.0	298.5	563.5	677.4
122.5°	144.8	166.6	289.9	536.7	641.4
125°	157.5	178.6	290.7	504.2	595.2
127.5°	167.9	190.1	290.1	466.4	556.4
130°	174.2	197.2	291.7	440.5	526.7
132.5°	180.5	203.5	290.1	429.2	500.0
135°	191.9	212.9	289.8	414.5	475.8
137.5°	201.7	224.3	289.8	398.2	450.7
140°	209.5	230.6	289.8	388.7	436.6
142.5°	217.3	236.9	291.3	377.7	422.5
145°	227.1	246.3	291.7	361.1	399.4
147.5°	238.9	255.7	294.1	349.2	378.7
150°	246.7	262.0	295.6	341.2	366.1
152.5°	254.5	268.3	295.6	334.9	355.2
155°	266.3	275.8	297.6	327.3	342.6
157.5°	275.7	284.9	299.9	322.5	333.6
160°	281.9	289.6	301.5	319.4	328.9
162.5°	286.6	294.3	303.1	317.7	324.2
165°	295.6	299.5	305.4	313.4	319.1
167.5°	300.7	304.2	307.4	311.4	314.8
170°	305.4	307.3	307.4	311.3	313.3
172.5°	307.0	310.4	309.0	309.8	311.7
175°	311.3	313.2	311.3	309.3	307.4
177.5°	311.3	312.8	311.3	311.3	309.7
180°	311.3	311.3	311.3	311.3	311.3

(END OF REPORT)