

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: P644998

Luminaire Tested: OMN4DIP-SR4F0-50D75U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644998
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-SR4F0-50D75U835-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

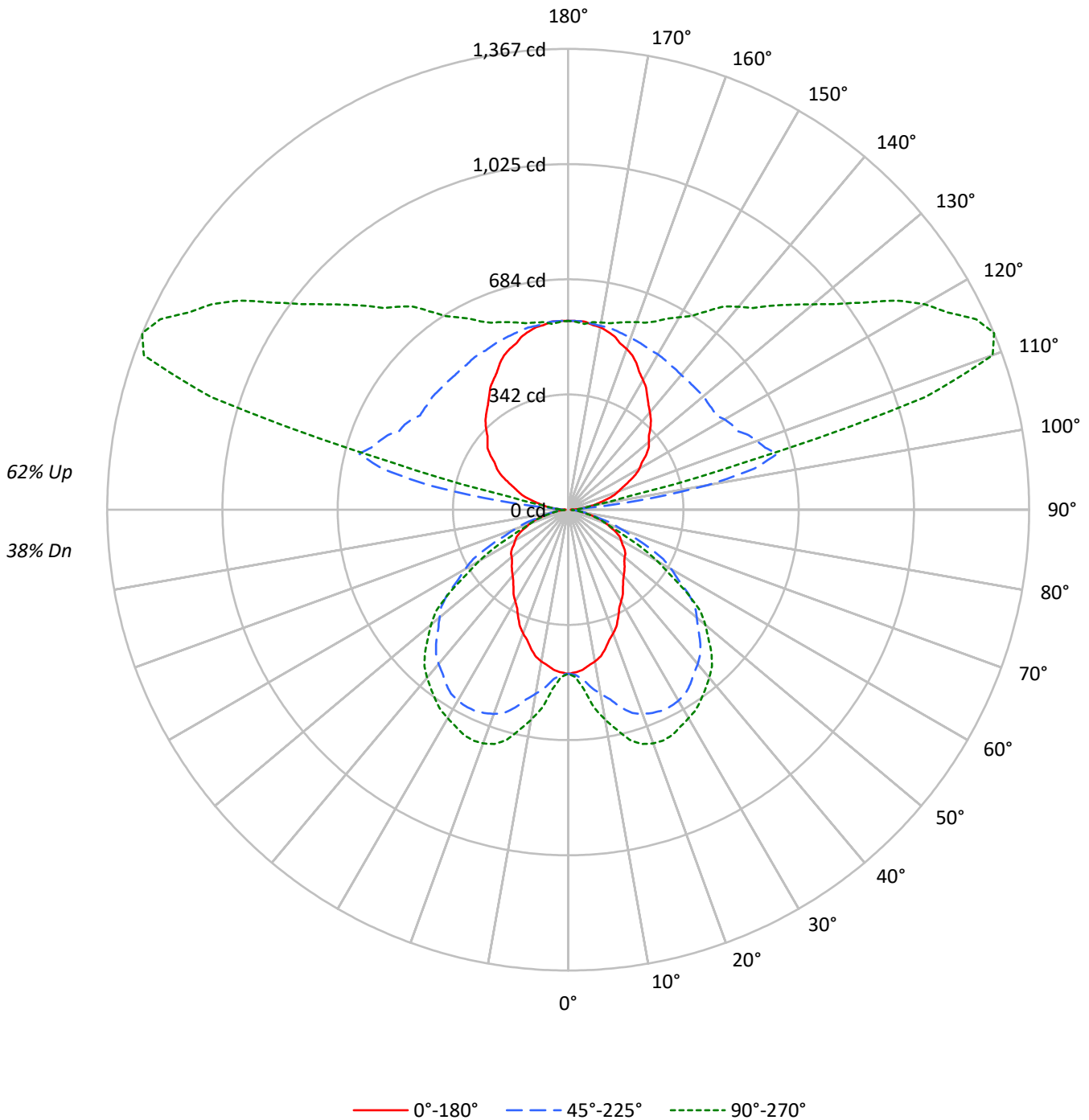
Lumens per Lamp: N/A
Luminaire Lumens: 4893.0 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 35.1
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

TEST NUMBER: P644998

CATALOG NUMBER: OMN4DIP-SR4F0-50D75U835-CLBOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644998

CATALOG NUMBER: OMN4DIP-SR4F0-50D75U835-CLBOOB-1DUDD-WW

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	50	30	10	0	
RCR																						
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	95	91	87	84	86	83	80	77	67	65	63	53	52	50	40	39	38	32				
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27				
3	79	70	63	57	71	64	57	52	52	47	44	41	38	35	31	29	27	23				
4	72	62	54	48	65	56	49	44	46	41	37	37	33	30	28	25	23	19				
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17				
6	61	49	41	35	55	45	38	33	37	31	27	29	25	23	22	20	18	15				
7	56	44	36	31	51	40	33	28	33	28	24	27	23	20	20	18	16	13				
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	19	16	14	11				
9	48	36	29	24	44	33	26	22	27	22	19	22	18	16	17	14	12	10				
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7857	7857	7857
5°	7741	8180	8656
10°	7496	9091	10371
15°	7131	10158	11823
20°	6708	11082	12677
25°	6249	11713	13105
30°	5845	12195	13313
35°	5576	12447	13539
40°	5391	12593	13715
45°	5400	12636	13721
50°	5486	12506	13333
55°	5734	12265	12104
60°	5848	11402	9830
65°	5922	9987	7221
70°	5665	7855	5608
75°	5084	5858	4729
80°	4314	4630	3784
85°	4187	3779	3149

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13721 cd/sqm



TEST NUMBER: P644998

CATALOG NUMBER: OMN4DIP-SR4F0-50D75U835-CLBOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	1.0
10°-20°	165.8	3.4
20°-30°	275.5	5.6
30°-40°	347.6	7.1
40°-50°	371.6	7.6
50°-60°	327.9	6.7
60°-70°	210.5	4.3
70°-80°	93.3	1.9
80°-90°	25.5	0.5
90°-100°	75.2	1.5
100°-110°	494.9	10.1
110°-120°	669.5	13.7
120°-130°	544.4	11.1
130°-140°	436.4	8.9
140°-150°	343.9	7.0
150°-160°	251.5	5.1
160°-170°	156.2	3.2
170°-180°	53.3	1.1
0°-30°	491.3	10.0
0°-40°	838.9	17.1
0°-60°	1538.4	31.4
0°-90°	1867.7	38.2
90°-120°	1239.7	25.3
90°-150°	2564.4	52.4
90°-180°	3025.0	61.8
0°-180°	4893.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	487	487	487	487	487	
5°	478	492	505	522	534	45
15°	427	492	608	681	707	119
25°	351	476	658	719	736	161
35°	283	434	632	672	687	178
45°	236	372	553	588	601	183
55°	204	292	436	438	430	181
65°	155	196	261	212	189	152
75°	82	90	94	80	76	87
85°	23	19	20	18	17	24
90°	8	11	14	17	15	7
95°	41	60	34	35	41	41
105°	117	175	641	816	539	124
115°	200	240	553	1144	1336	198
125°	282	320	521	907	1071	250
135°	345	383	522	746	856	266
145°	409	443	525	650	719	257
155°	479	496	536	589	617	220
165°	532	539	550	564	574	149
175°	560	564	560	557	553	53
180°	560	560	560	560	560	



TEST NUMBER: P644998

CATALOG NUMBER: OMN4DIP-SR4F0-50D75U835-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	486.6	486.6	486.6	486.6	486.6
2.5°	483.0	490.1	490.2	493.0	496.6
5°	477.6	491.9	504.7	522.0	534.1
7.5°	466.2	491.9	532.8	572.8	592.8
10°	457.2	492.6	554.5	608.3	632.6
12.5°	445.4	492.3	576.2	640.9	668.8
15°	426.6	491.9	607.7	680.7	707.3
17.5°	404.9	489.9	632.4	705.6	728.8
20°	390.4	487.8	645.0	714.6	737.8
22.5°	374.1	483.0	652.3	719.1	740.6
25°	350.8	475.9	657.5	719.0	735.6
27.5°	328.0	465.6	657.7	709.9	724.0
30°	313.5	457.3	654.1	700.8	714.1
32.5°	300.8	448.2	646.9	690.0	704.1
35°	282.9	434.5	631.5	672.5	686.9
37.5°	267.5	418.9	612.0	652.0	668.8
40°	255.8	406.2	597.5	637.4	650.7
42.5°	246.7	392.8	580.3	619.3	630.8
45°	236.5	371.5	553.4	587.6	600.9
47.5°	225.7	349.6	522.4	554.7	563.3
50°	218.4	333.5	497.9	527.4	530.8
52.5°	213.9	316.6	474.4	493.0	493.6
55°	203.7	292.2	435.7	437.8	430.0
57.5°	190.1	263.8	386.6	375.5	356.9
60°	181.1	244.1	353.1	331.0	304.4
62.5°	172.0	225.3	317.8	282.0	251.0
65°	155.0	196.0	261.4	212.2	189.0
67.5°	135.3	163.7	205.3	158.8	143.3
70°	120.0	142.1	166.4	129.9	118.8
72.5°	105.5	120.5	134.7	107.4	101.6
75°	81.5	90.3	93.9	80.2	75.8
77.5°	60.0	60.4	65.2	56.5	54.3
80°	46.4	44.2	49.8	43.0	40.7
82.5°	35.5	32.4	36.2	31.2	29.9
85°	22.6	19.3	20.4	18.1	17.0
87.5°	13.4	11.4	11.8	11.6	10.3
90°	7.9	11.4	13.8	17.3	15.1
92.5°	19.1	19.9	21.4	26.8	27.4
95°	40.6	60.3	33.8	35.2	41.0
97.5°	61.1	108.1	211.5	63.4	54.0
100°	77.1	132.4	419.2	124.6	82.2
102.5°	93.1	152.0	565.8	324.3	177.1
105°	117.2	174.6	641.2	815.9	539.1
107.5°	142.3	184.4	612.3	1186.9	1110.7
110°	158.3	198.6	595.4	1247.1	1339.0



TEST NUMBER: P644998

CATALOG NUMBER: OMN4DIP-SR4F0-50D75U835-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.2	215.5	578.5	1211.9	1367.2
115°	199.5	239.7	553.1	1143.7	1335.5
117.5°	225.3	265.1	546.8	1069.8	1267.1
120°	244.1	282.0	535.5	1013.6	1219.2
122.5°	258.2	298.0	520.5	965.3	1154.4
125°	281.8	319.7	521.4	906.9	1071.2
127.5°	301.1	340.6	521.0	839.0	1001.5
130°	312.4	353.7	523.8	792.8	947.9
132.5°	324.6	366.0	522.0	772.5	900.0
135°	345.3	383.2	521.5	746.0	856.3
137.5°	362.9	403.6	521.5	716.8	811.2
140°	377.0	414.9	521.5	699.7	785.8
142.5°	391.1	426.3	524.3	679.8	760.4
145°	408.8	443.2	525.0	649.9	718.8
147.5°	429.9	460.2	529.3	628.4	681.5
150°	444.0	471.6	532.1	614.2	658.9
152.5°	458.1	482.9	532.1	602.7	639.2
155°	479.2	496.5	535.6	589.1	616.7
157.5°	496.1	512.7	539.8	580.5	600.4
160°	507.4	521.2	542.7	574.8	592.0
162.5°	515.9	529.7	545.5	571.8	583.5
165°	532.1	539.0	549.7	564.0	574.4
167.5°	541.2	547.5	553.2	560.4	566.6
170°	549.7	553.2	553.2	560.4	563.8
172.5°	552.5	558.7	556.0	557.5	561.0
175°	560.3	563.7	560.3	556.7	553.2
177.5°	560.3	563.0	560.3	560.2	557.5
180°	560.3	560.3	560.3	560.3	560.3

(END OF REPORT)