

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: P644649

Luminaire Tested: OMN4DIP-SR4F0-100D75U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644649  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: OMN4DIP-SR4F0-100D75U930-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

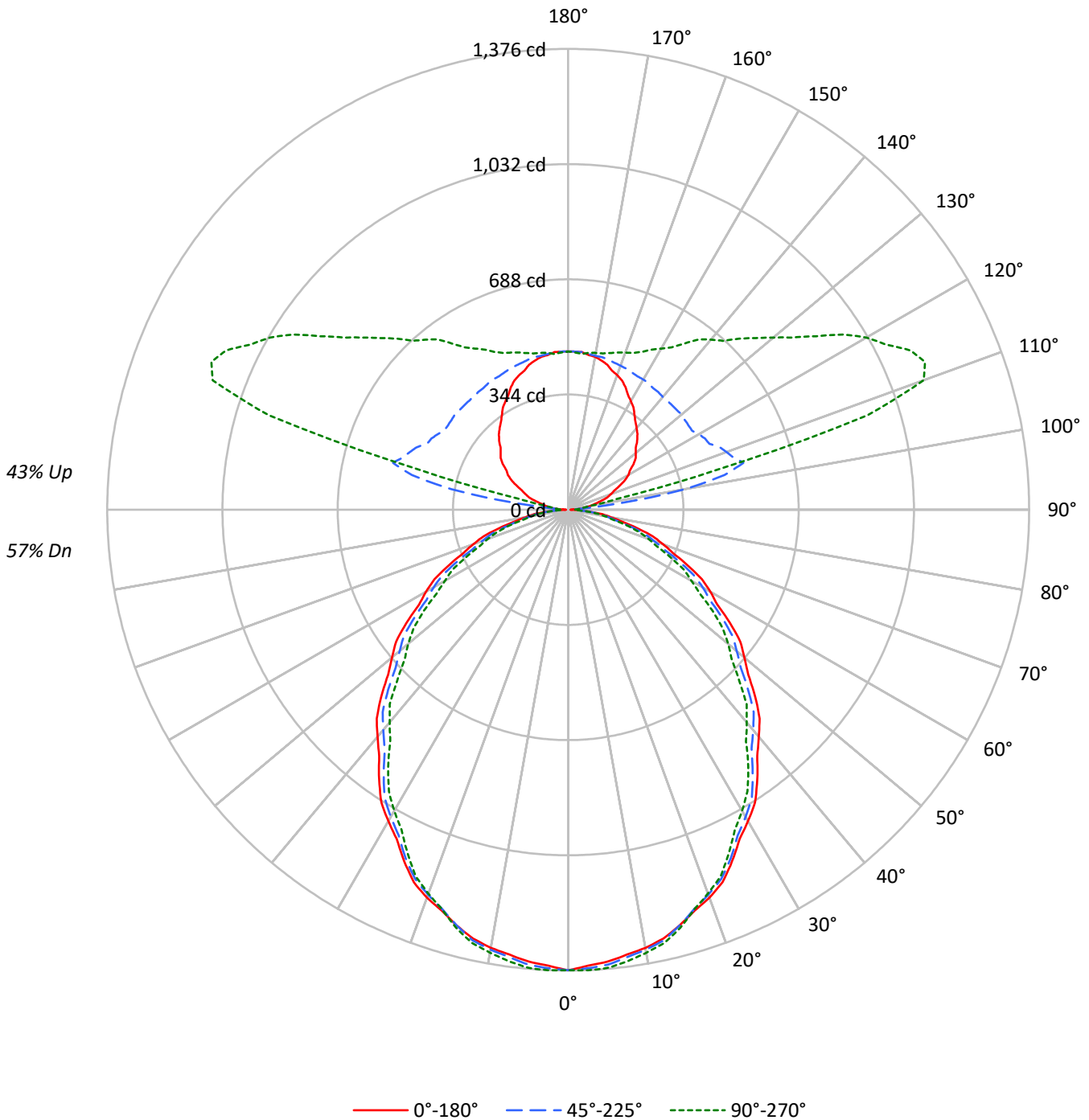
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5892.5 lumens  
Efficiency: N/A  
Efficacy: 116.2 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 50.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P644649

CATALOG NUMBER: OMN4DIP-SR4F0-100D75U930-FLLOOB-1DUDD-WW

### Luminous Intensity Polar Plot





TEST NUMBER: P644649

CATALOG NUMBER: OMN4DIP-SR4F0-100D75U930-FLLOOB-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	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	99	95	91	88	92	89	85	82	76	74	72	65	64	62	55	54	53	48
2	91	83	77	72	84	78	72	68	67	63	60	58	55	52	49	46	45	40
3	83	73	66	60	77	68	62	57	59	54	50	51	47	44	43	40	38	34
4	76	65	57	51	70	61	54	48	53	47	43	46	41	38	39	36	33	29
5	70	58	50	44	65	54	47	41	47	42	37	41	36	33	35	32	29	26
6	64	52	44	38	60	49	42	36	43	37	33	37	32	29	32	28	25	23
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	29	25	23	20
8	55	43	35	30	51	40	33	28	36	30	26	31	26	23	27	23	20	18
9	51	39	32	27	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	22201	22201	22201
5°	21951	22102	22255
10°	21776	21868	22022
15°	21483	21483	21608
20°	21182	21021	20957
25°	20630	20462	20197
30°	20020	19740	19356
35°	19395	18916	18473
40°	18649	18099	17466
45°	18025	17342	16488
50°	17246	16493	15646
55°	16588	15744	14798
60°	15826	14980	13714
65°	15007	13937	12863
70°	14219	12892	12010
75°	13306	11784	11204
80°	12171	10786	10265
85°	11430	10059	9355

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 18025 cd/sqm



TEST NUMBER: P644649

CATALOG NUMBER: OMN4DIP-SR4F0-100D75U930-FLLOOB-1DUDD-WW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.3	2.2
10°-20°	363.0	6.2
20°-30°	527.7	9.0
30°-40°	600.3	10.2
40°-50°	585.3	9.9
50°-60°	499.6	8.5
60°-70°	363.1	6.2
70°-80°	205.3	3.5
80°-90°	64.3	1.1
90°-100°	66.1	1.1
100°-110°	418.3	7.1
110°-120°	564.6	9.6
120°-130°	458.9	7.8
130°-140°	368.0	6.2
140°-150°	290.0	4.9
150°-160°	212.0	3.6
160°-170°	131.7	2.2
170°-180°	44.9	0.8
0°-30°	1020.0	17.3
0°-40°	1620.4	27.5
0°-60°	2705.3	45.9
0°-90°	3338.0	56.6
90°-120°	1049.0	17.8
90°-150°	2165.9	36.8
90°-180°	2555.0	43.4
0°-180°	5892.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1354	1374	1364	1362	1373	128
15°	1285	1302	1285	1284	1293	362
25°	1158	1169	1149	1128	1134	533
35°	984	988	960	937	937	614
45°	789	786	760	733	722	608
55°	589	587	559	533	526	526
65°	393	389	365	342	337	390
75°	213	206	189	181	180	226
85°	62	54	54	52	50	66
90°	8	12	17	18	18	9
95°	39	52	29	32	36	38
105°	102	147	542	689	455	108
115°	169	202	465	963	1126	168
125°	238	270	439	764	903	212
135°	291	323	440	629	722	224
145°	345	374	443	548	606	216
155°	404	419	452	497	520	186
165°	449	454	464	476	484	126
175°	472	475	472	469	466	45
180°	472	472	472	472	472	



TEST NUMBER: P644649

CATALOG NUMBER: OMN4DIP-SR4F0-100D75U930-FLLOOB-1DUDD-WW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1375.0	1375.0	1375.0	1375.0	1375.0
2.5°	1363.0	1380.6	1370.5	1370.6	1376.5
5°	1354.4	1374.5	1363.7	1362.1	1373.1
7.5°	1340.2	1359.9	1347.3	1345.4	1359.6
10°	1328.2	1346.5	1333.8	1330.4	1343.2
12.5°	1311.7	1330.0	1317.4	1312.4	1325.2
15°	1285.2	1301.6	1285.2	1283.5	1292.7
17.5°	1255.2	1269.5	1250.4	1244.2	1251.1
20°	1232.8	1245.6	1223.4	1214.2	1219.7
22.5°	1204.4	1217.2	1193.5	1179.8	1186.8
25°	1158.0	1168.9	1148.6	1128.2	1133.7
27.5°	1108.2	1116.6	1096.2	1075.3	1077.2
30°	1073.8	1079.3	1058.8	1036.4	1038.2
32.5°	1037.9	1041.9	1019.9	996.0	996.3
35°	984.0	987.7	959.7	937.2	937.2
37.5°	926.7	928.9	899.1	874.7	872.1
40°	884.8	888.5	858.7	834.2	828.7
42.5°	845.9	846.7	819.7	795.3	788.3
45°	789.4	785.8	759.5	733.1	722.1
47.5°	728.5	728.5	698.5	672.1	661.9
50°	686.6	686.6	656.6	630.3	622.9
52.5°	647.6	646.2	617.7	591.3	581.0
55°	589.3	587.4	559.3	533.0	525.7
57.5°	527.5	527.5	501.4	473.1	465.1
60°	490.1	490.1	463.9	435.6	424.7
62.5°	449.7	448.3	422.0	396.8	390.2
65°	392.8	389.2	364.8	342.2	336.7
67.5°	338.6	334.9	309.0	291.0	287.3
70°	301.2	297.5	273.1	258.1	254.4
72.5°	265.3	260.1	238.7	226.6	223.0
75°	213.3	205.9	188.9	181.4	179.6
77.5°	163.9	151.4	144.4	139.1	137.3
80°	130.9	120.0	116.0	112.2	110.4
82.5°	102.5	91.5	90.5	88.3	86.4
85°	61.7	54.4	54.3	52.3	50.5
87.5°	26.9	23.5	24.4	24.6	24.6
90°	7.5	12.2	17.2	18.3	18.3
92.5°	20.6	19.5	21.3	26.3	27.2
95°	38.7	51.8	29.4	32.4	36.4
97.5°	55.3	92.2	179.9	54.9	46.4
100°	69.5	113.4	354.3	105.1	70.2
102.5°	82.3	128.5	477.9	274.2	149.5
105°	101.5	147.2	541.5	688.8	454.6
107.5°	122.5	156.4	517.2	1001.7	936.5
110°	135.2	168.3	502.9	1052.4	1129.1



TEST NUMBER: P644649

CATALOG NUMBER: OMN4DIP-SR4F0-100D75U930-FLLOOB-1DUDD-WW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	149.5	182.5	488.6	1022.8	1152.8
115°	169.0	202.1	465.4	963.4	1126.1
117.5°	191.0	223.5	460.0	901.1	1068.4
120°	207.7	237.8	450.5	853.7	1028.0
122.5°	218.0	252.0	438.6	813.0	973.4
125°	238.5	270.4	438.6	763.8	903.2
127.5°	253.8	287.8	439.2	706.7	844.4
130°	263.3	298.2	441.6	668.5	799.3
132.5°	273.7	308.6	440.1	651.4	758.8
135°	291.2	323.1	439.7	629.0	722.0
137.5°	306.0	340.3	439.7	604.4	684.0
140°	317.9	349.9	439.7	589.9	662.6
142.5°	329.8	359.4	442.1	573.2	641.2
145°	344.7	373.7	442.7	548.0	606.1
147.5°	362.5	388.1	446.3	529.9	574.6
150°	374.4	397.6	448.7	517.8	555.6
152.5°	386.3	407.2	448.7	508.2	539.0
155°	404.1	418.6	451.6	496.7	520.0
157.5°	418.3	432.3	455.2	489.4	506.3
160°	427.9	439.5	457.6	484.6	499.2
162.5°	435.0	446.6	459.9	482.2	492.0
165°	448.7	454.5	463.5	475.6	484.3
167.5°	456.4	461.6	466.5	472.5	477.8
170°	463.5	466.4	466.5	472.5	475.4
172.5°	465.9	471.1	468.9	470.1	473.0
175°	472.4	475.3	472.4	469.4	466.5
177.5°	472.4	474.7	472.4	472.4	470.0
180°	472.4	472.4	472.4	472.4	472.4

(END OF REPORT)