

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: P644486

Luminaire Tested: OMN4DIP-SR4F0-100D100U830-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644486
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-SR4F0-100D100U830-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

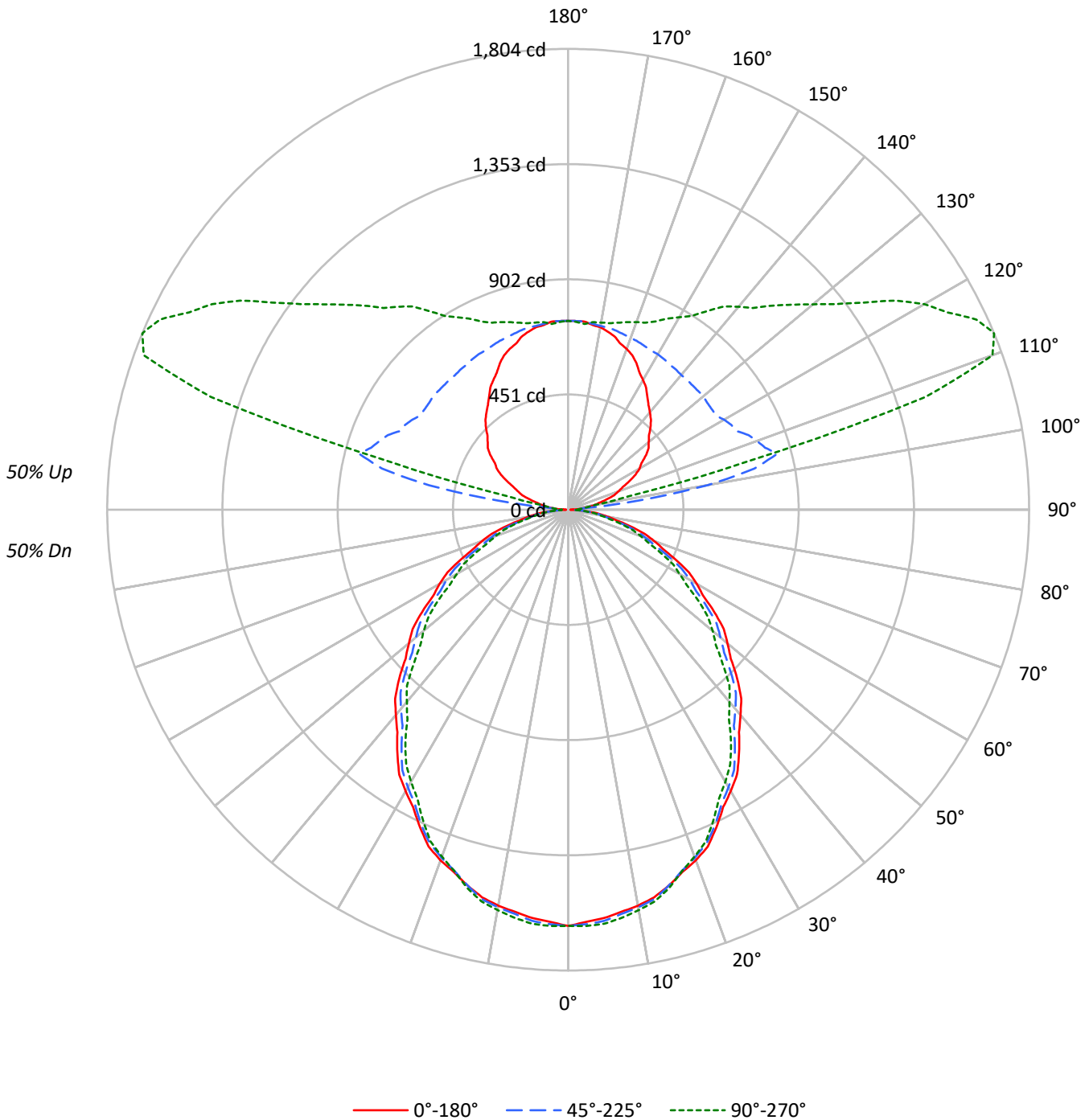
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7947.1 lumens
Efficiency: N/A
Efficacy: 134.9 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): 58.9
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

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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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	49	48	47	42				
2	89	82	76	71	82	76	70	66	64	60	57	53	51	48	44	42	40	35				
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	39	36	34	30				
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	30	26				
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	31	28	26	23				
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	29	25	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16				
9	50	38	31	26	47	36	29	24	31	26	22	26	22	19	22	19	17	14				
10	47	35	28	23	44	33	26	22	29	23	20	24	20	17	21	17	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26305	26305	26305
5°	26010	26190	26370
10°	25802	25911	26093
15°	25454	25454	25603
20°	25098	24909	24831
25°	24444	24246	23931
30°	23720	23390	22935
35°	22980	22413	21888
40°	22099	21444	20698
45°	21359	20548	19536
50°	20434	19542	18540
55°	19654	18657	17534
60°	18755	17751	16249
65°	17784	16512	15244
70°	16848	15276	14233
75°	15764	13967	13275
80°	14431	12775	12162
85°	13542	11912	11078

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21359 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.3	1.9
10°-20°	430.1	5.4
20°-30°	625.3	7.9
30°-40°	711.3	9.0
40°-50°	693.5	8.7
50°-60°	592.0	7.4
60°-70°	430.2	5.4
70°-80°	243.3	3.1
80°-90°	76.6	1.0
90°-100°	100.3	1.3
100°-110°	653.0	8.2
110°-120°	882.6	11.1
120°-130°	717.6	9.0
130°-140°	575.8	7.2
140°-150°	453.8	5.7
150°-160°	331.8	4.2
160°-170°	206.1	2.6
170°-180°	70.3	0.9
0°-30°	1208.7	15.2
0°-40°	1920.0	24.2
0°-60°	3205.5	40.3
0°-90°	3955.6	49.8
90°-120°	1635.9	20.6
90°-150°	3383.2	42.6
90°-180°	3991.0	50.2
0°-180°	7947.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1629	1629	1629	1629	1629	
5°	1605	1629	1616	1614	1627	152
15°	1523	1542	1523	1521	1532	429
25°	1372	1385	1361	1337	1343	631
35°	1166	1170	1137	1110	1110	728
45°	935	931	900	869	856	720
55°	698	696	663	632	623	623
65°	466	461	432	406	399	462
75°	253	244	224	215	213	268
85°	73	64	64	62	60	78
90°	9	16	23	25	25	11
95°	55	78	44	49	56	55
105°	155	228	846	1077	711	165
115°	262	315	728	1508	1762	261
125°	372	422	686	1195	1414	330
135°	456	506	688	984	1130	351
145°	539	585	693	858	949	339
155°	632	655	707	777	814	290
165°	702	711	725	744	758	197
175°	739	744	739	735	730	70
180°	739	739	739	739	739	



TEST NUMBER: P644486

CATALOG NUMBER: OMN4DIP-SR4F0-100D100U830-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1629.2	1629.2	1629.2	1629.2	1629.2
2.5°	1615.0	1635.8	1623.9	1624.0	1631.0
5°	1604.8	1628.7	1615.9	1614.0	1627.0
7.5°	1588.0	1611.4	1596.4	1594.1	1611.0
10°	1573.8	1595.5	1580.4	1576.4	1591.5
12.5°	1554.3	1576.0	1560.9	1555.1	1570.2
15°	1522.8	1542.3	1522.8	1520.8	1531.7
17.5°	1487.3	1504.2	1481.6	1474.2	1482.5
20°	1460.7	1475.9	1449.7	1438.7	1445.2
22.5°	1427.1	1442.2	1414.2	1398.0	1406.2
25°	1372.1	1385.1	1361.0	1336.8	1343.3
27.5°	1313.1	1323.1	1298.9	1274.2	1276.3
30°	1272.3	1278.8	1254.6	1228.1	1230.2
32.5°	1229.8	1234.5	1208.5	1180.1	1180.6
35°	1165.9	1170.3	1137.1	1110.5	1110.5
37.5°	1098.1	1100.7	1065.3	1036.4	1033.4
40°	1048.5	1052.8	1017.4	988.5	982.0
42.5°	1002.4	1003.2	971.3	942.3	934.1
45°	935.4	931.1	899.9	868.6	855.6
47.5°	863.1	863.1	827.7	796.4	784.2
50°	813.5	813.5	778.0	746.8	738.1
52.5°	767.4	765.7	731.9	700.6	688.5
55°	698.2	696.1	662.8	631.5	622.9
57.5°	625.1	625.1	594.1	560.6	551.0
60°	580.8	580.8	549.7	516.2	503.2
62.5°	532.9	531.1	500.1	470.2	462.4
65°	465.5	461.2	432.2	405.5	399.0
67.5°	401.2	396.9	366.2	344.8	340.5
70°	356.9	352.5	323.6	305.8	301.5
72.5°	314.3	308.2	282.8	268.6	264.2
75°	252.7	244.0	223.9	215.0	212.8
77.5°	194.2	179.4	171.1	164.9	162.7
80°	155.2	142.2	137.4	132.9	130.8
82.5°	121.5	108.5	107.3	104.6	102.4
85°	73.1	64.5	64.3	62.0	59.8
87.5°	31.9	28.1	29.3	29.8	29.8
90°	8.9	15.6	22.6	25.0	25.0
92.5°	27.1	26.9	30.2	38.2	40.1
95°	54.9	78.1	43.8	48.7	55.6
97.5°	81.5	141.4	279.6	84.6	72.0
100°	103.9	174.7	553.1	163.7	109.2
102.5°	124.4	198.8	746.5	428.4	233.9
105°	155.2	228.2	846.1	1077.3	711.4
107.5°	188.3	242.6	807.9	1566.9	1465.6
110°	208.8	261.2	785.6	1646.3	1766.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	231.1	283.5	763.3	1599.9	1804.1
115°	262.4	314.8	727.6	1507.7	1762.3
117.5°	296.8	348.3	719.2	1410.2	1672.1
120°	322.8	370.7	704.3	1336.0	1608.8
122.5°	339.7	392.9	685.7	1272.3	1523.3
125°	371.8	421.8	685.7	1195.3	1413.5
127.5°	396.5	449.2	686.7	1106.0	1321.5
130°	411.4	466.0	690.4	1046.2	1250.8
132.5°	428.2	482.8	688.6	1019.3	1187.6
135°	455.7	505.7	688.2	984.4	1129.9
137.5°	478.9	532.6	688.2	945.8	1070.4
140°	497.5	547.5	688.2	923.2	1036.9
142.5°	516.1	562.5	691.9	897.0	1003.4
145°	539.4	584.8	692.8	857.6	948.6
147.5°	567.3	607.3	698.4	829.3	899.3
150°	585.9	622.3	702.1	810.4	869.5
152.5°	604.5	637.2	702.1	795.3	843.5
155°	632.4	655.1	706.8	777.3	813.7
157.5°	654.7	676.5	712.4	766.0	792.3
160°	669.6	687.8	716.1	758.4	781.2
162.5°	680.7	698.9	719.8	754.6	770.0
165°	702.1	711.2	725.4	744.3	757.9
167.5°	714.2	722.4	730.0	739.5	747.7
170°	725.4	729.9	730.0	739.4	744.0
172.5°	729.1	737.3	733.7	735.7	740.3
175°	739.3	743.9	739.3	734.6	730.0
177.5°	739.3	743.0	739.3	739.2	735.6
180°	739.3	739.3	739.3	739.3	739.3

(END OF REPORT)