

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: P644516

Luminaire Tested: OMN4DIP-SR4F0-100D125U830-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644516
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-SR4F0-100D125U830-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

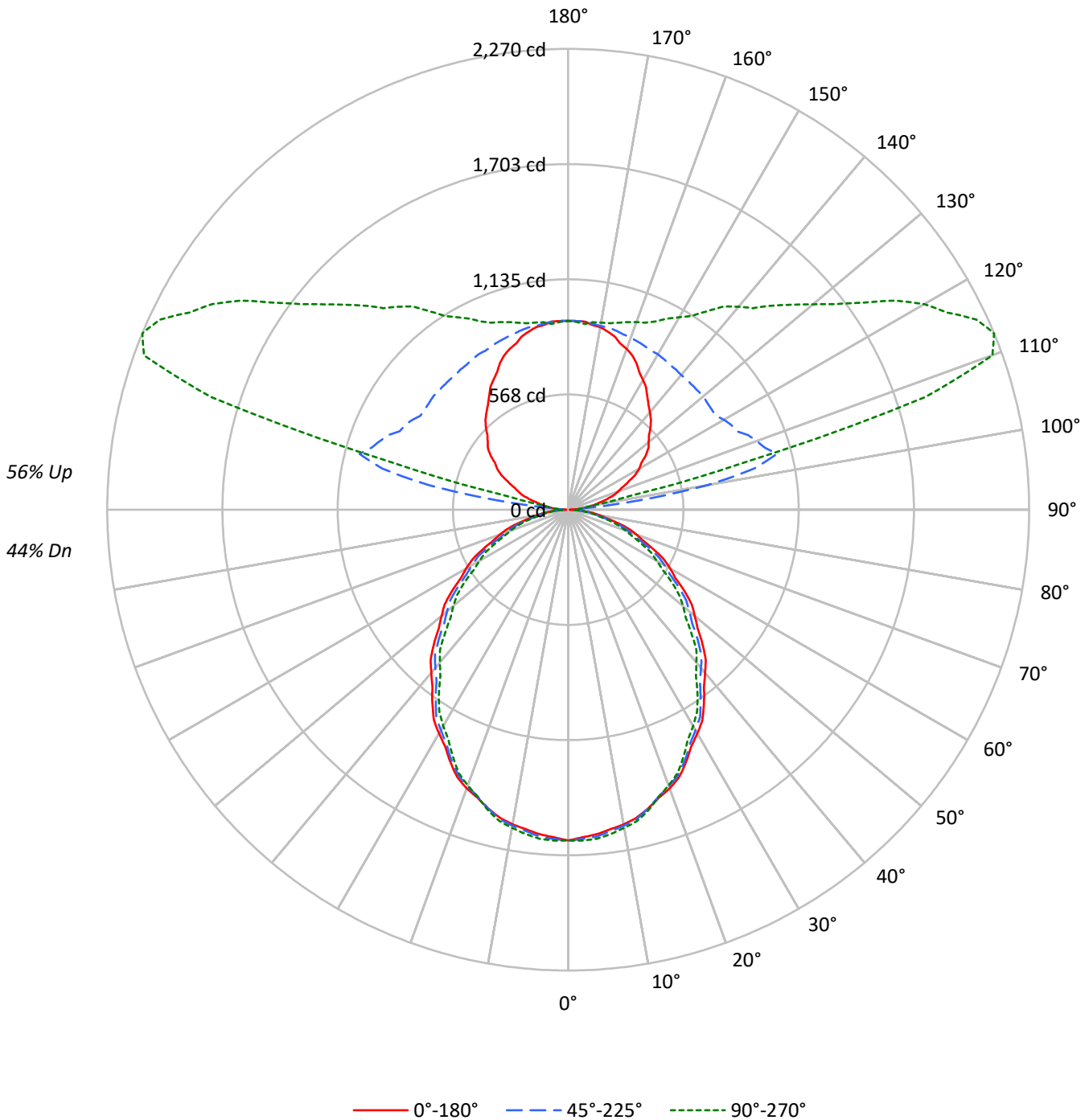
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8972.9 lumens
Efficiency: N/A
Efficacy: 131.8 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): 68.1
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

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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	97	92	88	85	88	85	81	78	70	68	66	57	55	54	45	44	43	37				
2	88	81	75	69	80	74	69	64	62	58	55	50	48	45	40	38	36	31				
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31	27				
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	31	29	27	23				
5	67	56	48	42	61	52	45	39	43	38	34	36	32	29	28	26	23	20				
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21	18				
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16				
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	22	19	16	14				
9	50	38	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13				
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	19	16	14	12				

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	1.7
10°-20°	430.1	4.8
20°-30°	625.3	7.0
30°-40°	711.3	7.9
40°-50°	693.5	7.7
50°-60°	592.0	6.6
60°-70°	430.2	4.8
70°-80°	243.3	2.7
80°-90°	77.0	0.9
90°-100°	123.8	1.4
100°-110°	820.3	9.1
110°-120°	1109.7	12.4
120°-130°	902.4	10.1
130°-140°	724.5	8.1
140°-150°	571.0	6.4
150°-160°	417.5	4.7
160°-170°	259.3	2.9
170°-180°	88.4	1.0
0°-30°	1208.7	13.5
0°-40°	1920.0	21.4
0°-60°	3205.5	35.7
0°-90°	3956.1	44.1
90°-120°	2053.7	22.9
90°-150°	4251.6	47.4
90°-180°	5017.0	55.9
0°-180°	8972.9	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	17	25	29	29	11
95°	64	96	54	60	69	66
105°	192	285	1063	1355	895	204
115°	328	395	915	1897	2217	327
125°	467	530	862	1504	1778	414
135°	573	636	866	1239	1422	441
145°	679	736	872	1079	1194	426
155°	796	824	889	978	1024	365
165°	883	895	913	936	954	248
175°	930	936	930	924	918	88
180°	930	930	930	930	930	

TEST NUMBER: P644516

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U830-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	28.3	29.8	30.6	30.6
90°	8.9	16.8	25.0	28.6	28.6
92.5°	30.0	31.0	35.5	45.6	48.5
95°	64.5	95.9	53.5	59.5	68.8
97.5°	98.6	175.6	350.2	105.4	90.0
100°	126.7	217.4	694.8	205.4	136.8
102.5°	153.0	248.3	938.2	538.4	294.1
105°	192.4	285.4	1063.4	1354.9	895.1
107.5°	234.1	303.4	1015.4	1970.9	1844.0
110°	260.4	326.9	987.3	2070.9	2223.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.5	355.0	959.2	2012.4	2270.0
115°	328.4	394.9	914.9	1897.0	2217.3
117.5°	371.7	437.0	904.4	1774.3	2103.8
120°	404.5	465.2	885.6	1681.0	2024.2
122.5°	426.1	493.2	862.2	1600.8	1916.6
125°	466.6	529.5	862.2	1503.9	1778.5
127.5°	498.3	564.1	863.4	1391.5	1662.7
130°	517.1	585.7	868.1	1316.3	1573.8
132.5°	538.7	607.3	866.3	1282.5	1494.2
135°	573.3	636.3	865.9	1238.6	1421.7
137.5°	602.6	670.1	865.9	1190.0	1346.8
140°	626.0	688.9	865.9	1161.6	1304.6
142.5°	649.4	707.7	870.5	1128.7	1262.5
145°	678.6	735.9	871.7	1079.1	1193.5
147.5°	713.8	764.1	878.7	1043.4	1131.5
150°	737.2	782.9	883.4	1019.7	1094.0
152.5°	760.6	801.7	883.4	1000.6	1061.3
155°	795.7	824.3	889.3	978.1	1023.8
157.5°	823.7	851.2	896.3	963.7	996.9
160°	842.5	865.3	901.0	954.3	982.9
162.5°	856.5	879.4	905.6	949.4	968.8
165°	883.4	894.9	912.7	936.5	953.6
167.5°	898.6	908.9	918.5	930.4	940.7
170°	912.7	918.4	918.5	930.3	936.1
172.5°	917.3	927.6	923.2	925.7	931.4
175°	930.2	935.9	930.2	924.2	918.5
177.5°	930.2	934.8	930.2	930.1	925.5
180°	930.2	930.2	930.2	930.2	930.2

(END OF REPORT)