

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: P644541

Luminaire Tested: OMN4DIP-SR4F0-100D125U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644541
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-SR4F0-100D125U940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

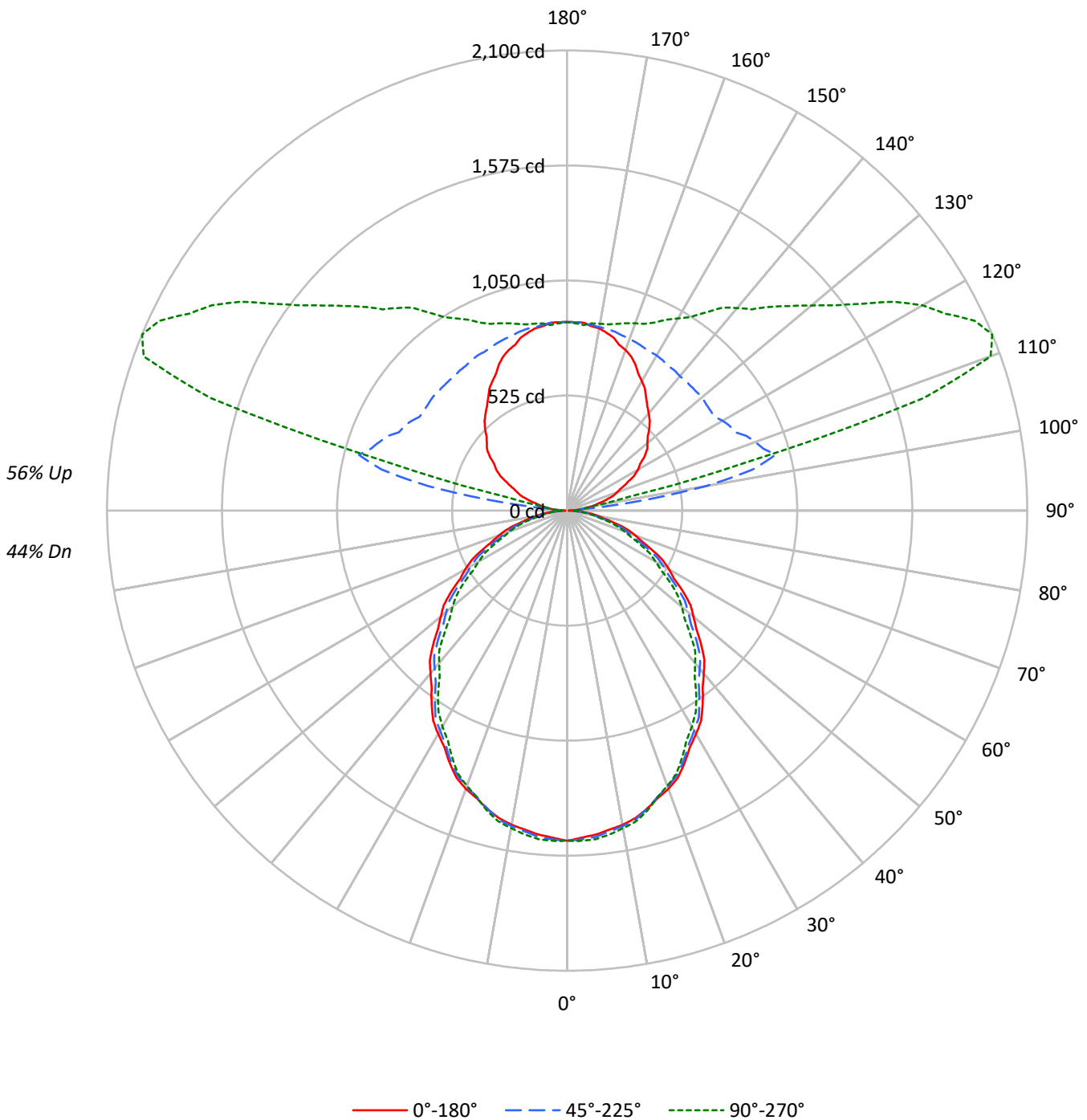
Lumens per Lamp: N/A
Luminaire Lumens: 8300.0 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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°	24332	24332	24332
5°	24060	24225	24392
10°	23868	23968	24137
15°	23545	23545	23682
20°	23216	23039	22969
25°	22611	22427	22135
30°	21942	21636	21216
35°	21258	20731	20247
40°	20440	19835	19144
45°	19758	19009	18071
50°	18902	18078	17151
55°	18182	17258	16220
60°	17347	16420	15029
65°	16451	15274	14101
70°	15583	14134	13166
75°	14579	12919	12277
80°	13343	11818	11251
85°	12542	11023	10263

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19758 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.8	1.7
10°-20°	397.8	4.8
20°-30°	578.4	7.0
30°-40°	658.0	7.9
40°-50°	641.5	7.7
50°-60°	547.6	6.6
60°-70°	398.0	4.8
70°-80°	225.0	2.7
80°-90°	71.2	0.9
90°-100°	114.5	1.4
100°-110°	758.7	9.1
110°-120°	1026.4	12.4
120°-130°	834.7	10.1
130°-140°	670.1	8.1
140°-150°	528.2	6.4
150°-160°	386.2	4.7
160°-170°	239.9	2.9
170°-180°	81.8	1.0
0°-30°	1118.0	13.5
0°-40°	1776.0	21.4
0°-60°	2965.1	35.7
0°-90°	3659.4	44.1
90°-120°	1899.7	22.9
90°-150°	3932.7	47.4
90°-180°	4641.0	55.9
0°-180°	8300.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1507	1507	1507	1507	1507	
5°	1484	1506	1495	1493	1505	141
15°	1409	1427	1409	1407	1417	397
25°	1269	1281	1259	1236	1242	584
35°	1078	1082	1052	1027	1027	673
45°	865	861	832	804	791	666
55°	646	644	613	584	576	576
65°	431	427	400	375	369	427
75°	234	226	207	199	197	248
85°	68	60	60	57	55	73
90°	8	16	23	26	26	10
95°	60	89	49	55	64	61
105°	178	264	984	1253	828	189
115°	304	365	846	1755	2051	302
125°	432	490	798	1391	1645	383
135°	530	588	801	1146	1315	408
145°	628	681	806	998	1104	394
155°	736	762	823	905	947	338
165°	817	828	844	866	882	229
175°	860	866	860	855	850	81
180°	860	860	860	860	860	

TEST NUMBER: P644541

CATALOG NUMBER: OMN4DIP-SR4F0-100D125U940-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1507.0	1507.0	1507.0	1507.0	1507.0
2.5°	1493.9	1513.1	1502.1	1502.2	1508.7
5°	1484.5	1506.5	1494.7	1492.9	1505.0
7.5°	1468.9	1490.5	1476.7	1474.6	1490.2
10°	1455.8	1475.8	1461.9	1458.1	1472.2
12.5°	1437.7	1457.8	1443.9	1438.4	1452.5
15°	1408.6	1426.6	1408.6	1406.8	1416.8
17.5°	1375.8	1391.4	1370.5	1363.7	1371.3
20°	1351.2	1365.2	1340.9	1330.8	1336.8
22.5°	1320.0	1334.1	1308.1	1293.1	1300.8
25°	1269.2	1281.2	1258.9	1236.5	1242.5
27.5°	1214.6	1223.9	1201.5	1178.6	1180.6
30°	1176.9	1182.9	1160.5	1136.0	1138.0
32.5°	1137.5	1142.0	1117.9	1091.6	1092.0
35°	1078.5	1082.5	1051.8	1027.2	1027.2
37.5°	1015.8	1018.2	985.4	958.7	955.9
40°	969.8	973.8	941.1	914.3	908.3
42.5°	927.2	928.0	898.5	871.6	864.0
45°	865.3	861.2	832.5	803.5	791.4
47.5°	798.4	798.4	765.6	736.6	725.4
50°	752.5	752.5	719.7	690.8	682.8
52.5°	709.8	708.2	677.0	648.1	636.8
55°	645.9	643.9	613.1	584.2	576.2
57.5°	578.2	578.2	549.5	518.5	509.7
60°	537.2	537.2	508.5	477.5	465.4
62.5°	492.9	491.3	462.6	434.9	427.7
65°	430.6	426.6	399.8	375.1	369.1
67.5°	371.1	367.1	338.7	318.9	314.9
70°	330.1	326.1	299.4	282.9	278.9
72.5°	290.7	285.1	261.6	248.4	244.4
75°	233.7	225.7	207.1	198.8	196.8
77.5°	179.6	166.0	158.3	152.5	150.5
80°	143.5	131.5	127.1	123.0	121.0
82.5°	112.4	100.3	99.2	96.7	94.7
85°	67.7	59.6	59.5	57.4	55.4
87.5°	29.5	26.2	27.6	28.3	28.3
90°	8.2	15.5	23.1	26.5	26.5
92.5°	27.8	28.6	32.8	42.2	44.9
95°	59.7	88.7	49.4	55.1	63.6
97.5°	91.2	162.4	323.9	97.5	83.2
100°	117.2	201.1	642.7	190.0	126.5
102.5°	141.5	229.7	867.8	498.0	272.1
105°	178.0	264.0	983.6	1253.3	828.0
107.5°	216.6	280.7	939.2	1823.1	1705.8
110°	240.9	302.4	913.3	1915.6	2056.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.9	328.4	887.3	1861.5	2099.7
115°	303.8	365.3	846.3	1754.7	2051.0
117.5°	343.8	404.3	836.5	1641.2	1946.0
120°	374.1	430.3	819.2	1554.9	1872.4
122.5°	394.1	456.2	797.6	1480.8	1772.9
125°	431.6	489.8	797.6	1391.2	1645.1
127.5°	461.0	521.8	798.6	1287.2	1538.0
130°	478.3	541.8	803.0	1217.6	1455.7
132.5°	498.3	561.8	801.3	1186.4	1382.1
135°	530.3	588.5	800.9	1145.7	1315.0
137.5°	557.4	619.8	800.9	1100.8	1245.8
140°	579.0	637.3	800.9	1074.5	1206.8
142.5°	600.7	654.7	805.3	1044.0	1167.8
145°	627.8	680.7	806.3	998.1	1104.0
147.5°	660.2	706.8	812.8	965.1	1046.6
150°	681.9	724.2	817.2	943.2	1012.0
152.5°	703.5	741.6	817.2	925.6	981.7
155°	736.0	762.4	822.6	904.7	947.0
157.5°	762.0	787.4	829.1	891.5	922.1
160°	779.3	800.4	833.4	882.7	909.2
162.5°	792.3	813.4	837.7	878.2	896.2
165°	817.2	827.7	844.2	866.2	882.1
167.5°	831.2	840.8	849.6	860.7	870.2
170°	844.2	849.5	849.6	860.6	865.9
172.5°	848.5	858.1	854.0	856.2	861.5
175°	860.5	865.7	860.5	854.9	849.6
177.5°	860.5	864.7	860.5	860.4	856.1
180°	860.5	860.5	860.5	860.5	860.5

(END OF REPORT)