

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: P644726

Luminaire Tested: OMN4DIP-SR4F0-125D150U830-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644726
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-SR4F0-125D150U830-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

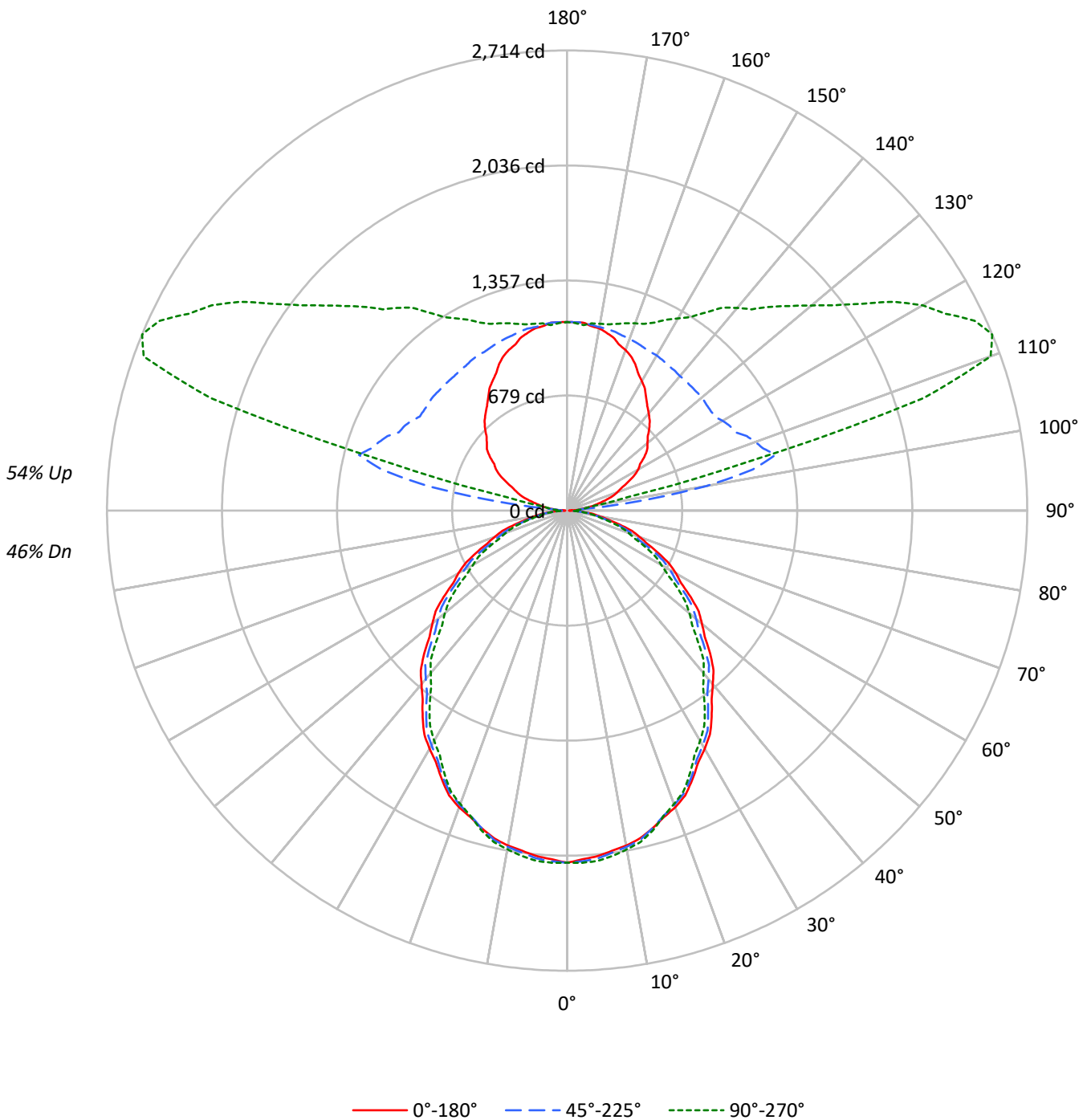
Lumens per Lamp: N/A
Luminaire Lumens: 11042.1 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 88.6
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	81	81	81	66	66	66	52	52	52	46				46
1	97	93	89	85	89	85	82	79	71	69	67	58	56	55	46	45	44				39	
2	88	81	75	70	81	74	69	65	62	58	55	51	48	46	41	39	37				32	
3	81	71	64	58	74	66	59	54	55	50	47	45	42	39	36	34	32				28	
4	74	63	55	49	67	58	51	46	49	44	40	40	37	34	32	30	28				24	
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24				21	
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	21				18	
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19				16	
8	54	41	34	28	49	38	32	27	33	27	23	27	23	20	22	19	17				15	
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15				13	
10	47	35	27	23	43	32	26	21	28	22	19	23	19	16	19	16	14				12	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33532	33532	33532
5°	33156	33386	33614
10°	32891	33029	33262
15°	32448	32448	32637
20°	31995	31751	31654
25°	31158	30907	30505
30°	30238	29817	29237
35°	29296	28570	27902
40°	28169	27335	26382
45°	27227	26195	24905
50°	26048	24912	23634
55°	25056	23783	22351
60°	23906	22627	20712
65°	22670	21051	19431
70°	21475	19473	18142
75°	20093	17804	16924
80°	18391	16290	15500
85°	17266	15172	14135

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 27227 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.4	1.8
10°-20°	548.2	5.0
20°-30°	797.1	7.2
30°-40°	906.7	8.2
40°-50°	884.1	8.0
50°-60°	754.7	6.8
60°-70°	548.4	5.0
70°-80°	310.1	2.8
80°-90°	98.0	0.9
90°-100°	148.8	1.3
100°-110°	981.1	8.9
110°-120°	1326.9	12.0
120°-130°	1079.0	9.8
130°-140°	866.1	7.8
140°-150°	682.6	6.2
150°-160°	499.1	4.5
160°-170°	310.0	2.8
170°-180°	105.7	1.0
0°-30°	1540.7	14.0
0°-40°	2447.5	22.2
0°-60°	4086.2	37.0
0°-90°	5042.8	45.7
90°-120°	2456.7	22.2
90°-150°	5084.5	46.0
90°-180°	5999.0	54.3
0°-180°	11042.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2077	2077	2077	2077	2077	
5°	2046	2076	2060	2057	2074	194
15°	1941	1966	1941	1939	1952	547
25°	1749	1766	1735	1704	1712	805
35°	1486	1492	1450	1416	1416	928
45°	1192	1187	1147	1107	1091	918
55°	890	887	845	805	794	794
65°	593	588	551	517	509	589
75°	322	311	285	274	271	342
85°	93	82	82	79	76	100
90°	11	21	31	35	35	14
95°	79	115	64	72	83	80
105°	231	342	1272	1620	1070	245
115°	393	472	1094	2268	2651	391
125°	558	633	1031	1798	2126	496
135°	685	761	1035	1481	1700	528
145°	811	880	1042	1290	1427	510
155°	951	985	1063	1169	1224	437
165°	1056	1070	1091	1120	1140	297
175°	1112	1119	1112	1105	1098	105
180°	1112	1112	1112	1112	1112	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2076.8	2076.8	2076.8	2076.8	2076.8
2.5°	2058.7	2085.2	2070.0	2070.2	2079.1
5°	2045.7	2076.1	2059.9	2057.4	2074.0
7.5°	2024.2	2054.1	2035.0	2032.1	2053.6
10°	2006.2	2033.8	2014.6	2009.4	2028.8
12.5°	1981.3	2008.9	1989.8	1982.3	2001.6
15°	1941.2	1966.0	1941.2	1938.7	1952.5
17.5°	1896.0	1917.5	1888.6	1879.3	1889.8
20°	1862.1	1881.4	1847.9	1834.0	1842.3
22.5°	1819.1	1838.5	1802.7	1782.1	1792.6
25°	1749.0	1765.6	1734.9	1704.0	1712.3
27.5°	1673.9	1686.6	1655.8	1624.2	1627.0
30°	1621.9	1630.2	1599.3	1565.4	1568.2
32.5°	1567.6	1573.7	1540.5	1504.4	1504.9
35°	1486.3	1491.8	1449.5	1415.6	1415.6
37.5°	1399.8	1403.1	1358.0	1321.2	1317.3
40°	1336.5	1342.0	1296.9	1260.0	1251.7
42.5°	1277.7	1278.8	1238.2	1201.2	1190.7
45°	1192.4	1186.9	1147.2	1107.3	1090.7
47.5°	1100.3	1100.3	1055.1	1015.2	999.7
50°	1037.0	1037.0	991.8	952.0	940.9
52.5°	978.2	976.0	933.0	893.1	877.6
55°	890.1	887.3	844.9	805.0	794.0
57.5°	796.8	796.8	757.3	714.6	702.4
60°	740.3	740.3	700.7	658.0	641.4
62.5°	679.3	677.1	637.5	599.4	589.4
65°	593.4	587.8	551.0	516.9	508.6
67.5°	511.4	505.9	466.8	439.5	434.0
70°	454.9	449.4	412.5	389.8	384.3
72.5°	400.7	392.9	360.5	342.3	336.8
75°	322.1	311.1	285.4	274.0	271.3
77.5°	247.5	228.7	218.1	210.2	207.4
80°	197.8	181.2	175.2	169.5	166.7
82.5°	154.8	138.3	136.8	133.3	130.5
85°	93.2	82.2	81.9	79.1	76.3
87.5°	40.7	36.0	37.8	38.7	38.7
90°	11.3	20.9	30.9	35.1	35.1
92.5°	37.1	37.9	43.2	55.3	58.6
95°	78.6	115.4	64.4	71.7	82.6
97.5°	119.1	210.7	419.2	126.4	107.7
100°	152.7	260.6	831.0	245.8	163.7
102.5°	184.0	297.4	1121.9	643.9	351.7
105°	231.0	341.7	1271.6	1620.0	1070.1
107.5°	280.7	363.3	1214.3	2356.5	2204.6
110°	312.1	391.4	1180.7	2476.0	2657.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	345.6	424.9	1147.1	2406.1	2713.8
115°	393.2	472.5	1093.9	2267.9	2650.8
117.5°	444.9	522.9	1081.3	2121.2	2515.2
120°	484.1	556.6	1059.0	2009.7	2420.0
122.5°	509.8	590.0	1031.0	1913.8	2291.3
125°	558.2	633.4	1031.0	1798.0	2126.3
127.5°	595.9	674.7	1032.4	1663.6	1987.8
130°	618.3	700.4	1038.0	1573.7	1881.5
132.5°	644.0	726.1	1035.7	1533.3	1786.3
135°	685.4	760.7	1035.2	1480.8	1699.6
137.5°	720.4	801.1	1035.2	1422.7	1610.1
140°	748.4	823.6	1035.2	1388.8	1559.7
142.5°	776.4	846.1	1040.8	1349.3	1509.4
145°	811.3	879.7	1042.2	1290.1	1426.8
147.5°	853.3	913.5	1050.5	1247.4	1352.7
150°	881.3	936.0	1056.1	1219.0	1307.9
152.5°	909.3	958.5	1056.1	1196.3	1268.8
155°	951.2	985.4	1063.1	1169.3	1224.0
157.5°	984.8	1017.6	1071.5	1152.2	1191.8
160°	1007.2	1034.5	1077.1	1140.8	1175.0
162.5°	1024.0	1051.3	1082.7	1135.0	1158.3
165°	1056.1	1069.8	1091.1	1119.6	1140.1
167.5°	1074.3	1086.6	1098.1	1112.4	1124.7
170°	1091.1	1098.0	1098.1	1112.3	1119.1
172.5°	1096.7	1109.0	1103.7	1106.7	1113.5
175°	1112.1	1118.9	1112.1	1104.9	1098.1
177.5°	1112.1	1117.6	1112.1	1112.0	1106.5
180°	1112.1	1112.1	1112.1	1112.1	1112.1

(END OF REPORT)