

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: P1032485

Luminaire Tested: S124DIW-B1020D1340UB2750-4F0-XX-W2A-D_2700K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032485
REPORT IS A COMBINATION OF REPORTS P996703 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1340UB2750-4F0-XX-W2A-D_2700K
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

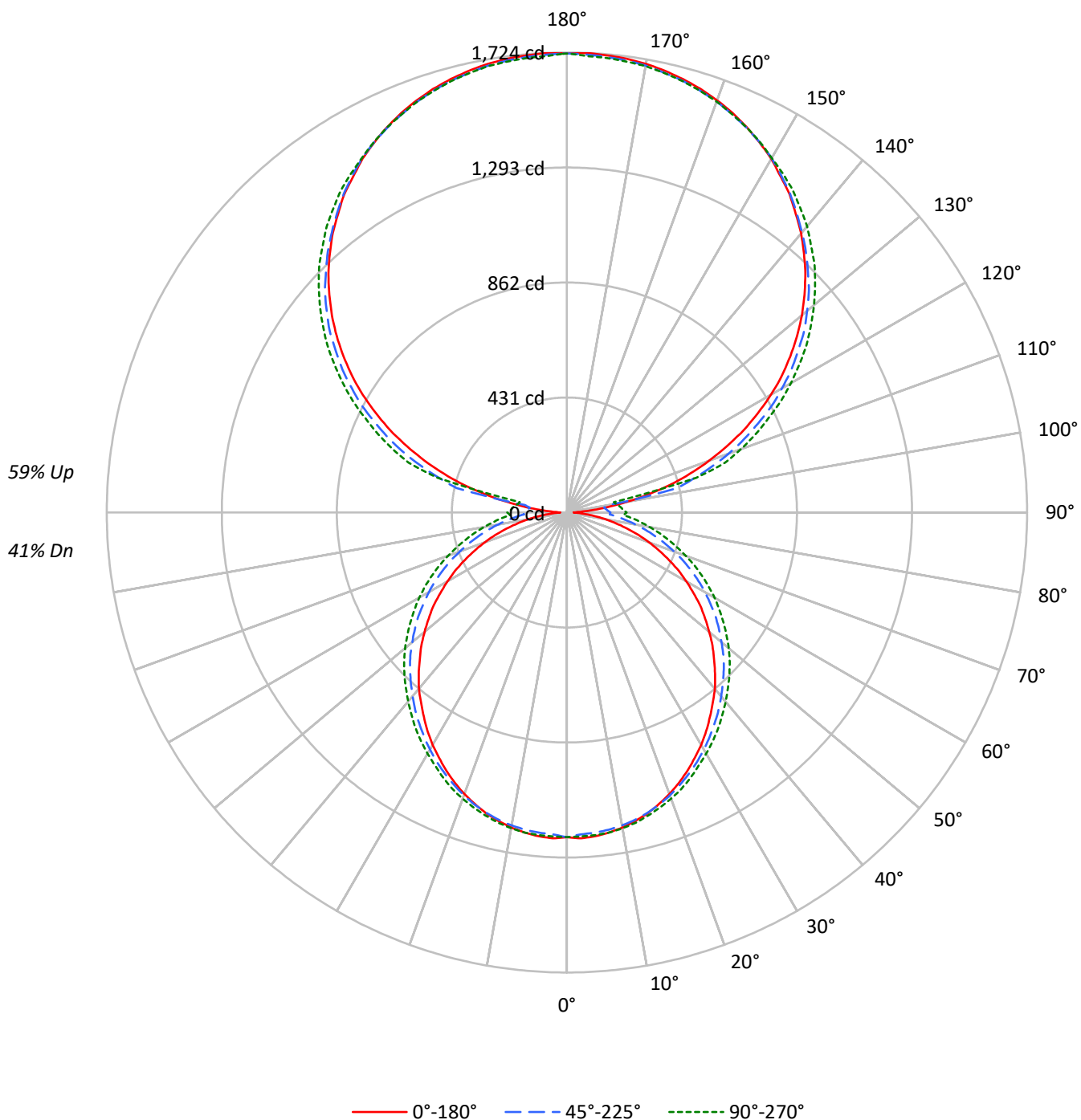
Lumens per Lamp: N/A
Luminaire Lumens: 9474.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47			41
1	95	90	86	82	86	82	79	75	67	65	62	53	52	50	41	39	38			32
2	86	78	72	67	78	71	66	61	58	54	51	46	44	41	35	33	32			26
3	78	68	61	55	71	62	56	51	51	46	42	41	37	34	31	29	27			22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23			19
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	25	22	20			16
6	60	48	40	34	54	44	37	31	36	31	27	29	25	22	22	19	17			14
7	55	43	35	29	50	40	32	27	33	27	23	26	22	19	20	17	15			12
8	51	39	31	26	47	36	29	24	30	24	20	24	20	17	19	16	13			11
9	48	36	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12			10
10	45	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11			9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9921	9921	9921
5°	9948	9663	9680
10°	9884	9472	9445
15°	9791	9259	9181
20°	9654	9027	8923
25°	9499	8772	8646
30°	9333	8519	8363
35°	9144	8261	8111
40°	8992	8012	7851
45°	8768	7780	7620
50°	8577	7515	7378
55°	8379	7260	7098
60°	8072	6942	6834
65°	7734	6601	6517
70°	7324	6209	6151
75°	6752	5776	5802
80°	6108	5332	5436
85°	5254	4887	5140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8768 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.2
10°-20°	330.3	3.5
20°-30°	499.4	5.3
30°-40°	604.2	6.4
40°-50°	638.7	6.7
50°-60°	601.1	6.3
60°-70°	498.8	5.3
70°-80°	350.0	3.7
80°-90°	200.9	2.1
90°-100°	174.6	1.8
100°-110°	463.0	4.9
110°-120°	776.4	8.2
120°-130°	944.4	10.0
130°-140°	989.3	10.4
140°-150°	914.6	9.7
150°-160°	735.3	7.8
160°-170°	474.2	5.0
170°-180°	163.4	1.7
0°-30°	945.0	10.0
0°-40°	1549.1	16.4
0°-60°	2789.0	29.4
0°-90°	3838.7	40.5
90°-120°	1414.0	14.9
90°-150°	4262.3	45.0
90°-180°	5635.0	59.5
0°-180°	9474.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1214	1204	1215	1214	116
15°	1168	1169	1165	1177	1176	329
25°	1068	1076	1080	1095	1097	492
35°	935	951	965	984	988	585
45°	779	805	831	854	861	602
55°	610	639	680	707	715	544
65°	422	466	512	546	557	419
75°	234	285	342	380	392	249
85°	72	129	191	232	245	75
90°	26	94	163	210	224	19
95°	88	90	147	191	205	101
105°	400	434	491	537	502	419
115°	731	747	790	822	832	720
125°	1022	1026	1057	1087	1096	913
135°	1264	1262	1277	1301	1312	974
145°	1455	1458	1458	1467	1475	909
155°	1594	1595	1591	1596	1593	735
165°	1682	1675	1675	1685	1674	475
175°	1720	1712	1714	1725	1710	164
180°	1720	1720	1720	1720	1720	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.6	1216.6	1216.6	1216.6	1216.6
2.5°	1222.1	1218.0	1207.1	1216.6	1215.3
5°	1218.0	1213.9	1204.4	1215.3	1213.9
7.5°	1209.8	1207.1	1198.9	1211.2	1209.8
10°	1198.9	1197.6	1190.7	1203.0	1201.6
12.5°	1183.9	1183.9	1179.8	1190.7	1190.7
15°	1167.6	1168.9	1164.9	1177.1	1175.8
17.5°	1145.8	1149.9	1148.5	1160.8	1159.4
20°	1122.6	1126.7	1128.1	1141.7	1141.7
22.5°	1096.7	1102.2	1104.9	1118.5	1121.3
25°	1068.1	1076.3	1080.4	1095.4	1096.7
27.5°	1036.8	1049.1	1054.5	1068.1	1069.5
30°	1005.5	1016.4	1025.9	1040.9	1043.6
32.5°	971.4	985.0	995.9	1013.6	1016.4
35°	934.6	951.0	964.6	983.7	987.7
37.5°	897.8	916.9	933.3	952.3	956.4
40°	862.4	880.1	899.2	919.6	925.1
42.5°	821.5	842.0	865.1	888.3	892.4
45°	779.3	805.2	831.1	854.2	861.0
47.5°	739.8	765.7	795.6	818.8	827.0
50°	696.2	726.2	756.1	783.4	791.6
52.5°	652.6	682.6	718.0	745.2	753.4
55°	610.4	639.0	679.8	707.1	715.3
57.5°	562.7	598.1	637.6	670.3	677.1
60°	516.4	551.8	596.7	628.1	639.0
62.5°	471.4	510.9	555.9	587.2	598.1
65°	422.3	465.9	512.3	546.3	557.2
67.5°	376.0	422.3	471.4	505.5	516.4
70°	328.3	374.7	426.4	463.2	472.8
72.5°	282.0	329.7	385.6	421.0	431.9
75°	234.3	284.7	342.0	380.1	392.4
77.5°	189.4	242.5	302.5	340.6	354.2
80°	148.5	203.0	262.9	303.8	314.7
82.5°	107.6	164.9	224.8	267.0	279.3
85°	72.2	129.4	190.7	231.6	245.2
87.5°	45.0	100.8	160.8	200.3	212.5
90°	25.7	94.3	163.2	210.4	223.9
92.5°	39.7	84.8	153.7	199.6	210.5
95°	88.5	89.7	146.8	191.3	204.9
97.5°	151.4	219.3	140.0	181.8	195.4
100°	226.0	284.5	160.1	175.0	185.9
102.5°	310.9	356.3	423.5	169.5	180.4
105°	399.5	434.5	491.3	537.0	501.6
107.5°	483.2	510.1	566.8	607.4	622.0
110°	566.7	589.6	645.0	678.9	693.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	647.6	671.7	719.2	747.9	764.0
115°	731.2	747.3	789.6	822.2	831.7
117.5°	807.1	820.4	865.1	892.4	903.3
120°	882.9	892.2	930.4	960.2	968.6
122.5°	955.0	957.5	996.9	1025.4	1032.4
125°	1021.7	1025.6	1057.0	1086.8	1096.3
127.5°	1087.3	1087.3	1121.0	1144.3	1152.5
130°	1149.1	1149.0	1174.6	1200.4	1208.6
132.5°	1207.0	1208.2	1229.7	1254.1	1261.0
135°	1263.5	1262.2	1276.9	1301.3	1312.0
137.5°	1314.9	1313.6	1325.5	1348.4	1354.1
140°	1365.1	1366.4	1370.3	1391.8	1399.9
142.5°	1408.8	1414.0	1413.9	1431.4	1436.8
145°	1455.1	1457.6	1457.6	1467.1	1475.1
147.5°	1491.2	1497.5	1496.2	1498.9	1505.6
150°	1531.0	1534.8	1533.5	1533.5	1534.8
152.5°	1563.1	1567.0	1564.4	1567.0	1565.7
155°	1594.0	1595.3	1591.4	1596.5	1592.7
157.5°	1621.0	1621.0	1615.8	1622.3	1615.8
160°	1644.1	1640.3	1639.0	1646.7	1639.0
162.5°	1664.7	1659.6	1658.3	1666.0	1657.0
165°	1681.5	1675.0	1675.0	1685.3	1673.7
167.5°	1695.6	1689.2	1687.9	1699.5	1686.6
170°	1707.2	1699.5	1700.8	1711.0	1698.2
172.5°	1714.9	1707.2	1708.5	1718.8	1704.6
175°	1720.1	1712.3	1713.6	1725.2	1709.8
177.5°	1723.9	1714.9	1717.5	1727.8	1712.3
180°	1720.1	1720.1	1720.1	1720.1	1720.1

(END OF REPORT)