

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: P1033134

Luminaire Tested: S124DIW-B1020D1340UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033134
REPORT IS A COMBINATION OF REPORTS P996728 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1340UB35-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

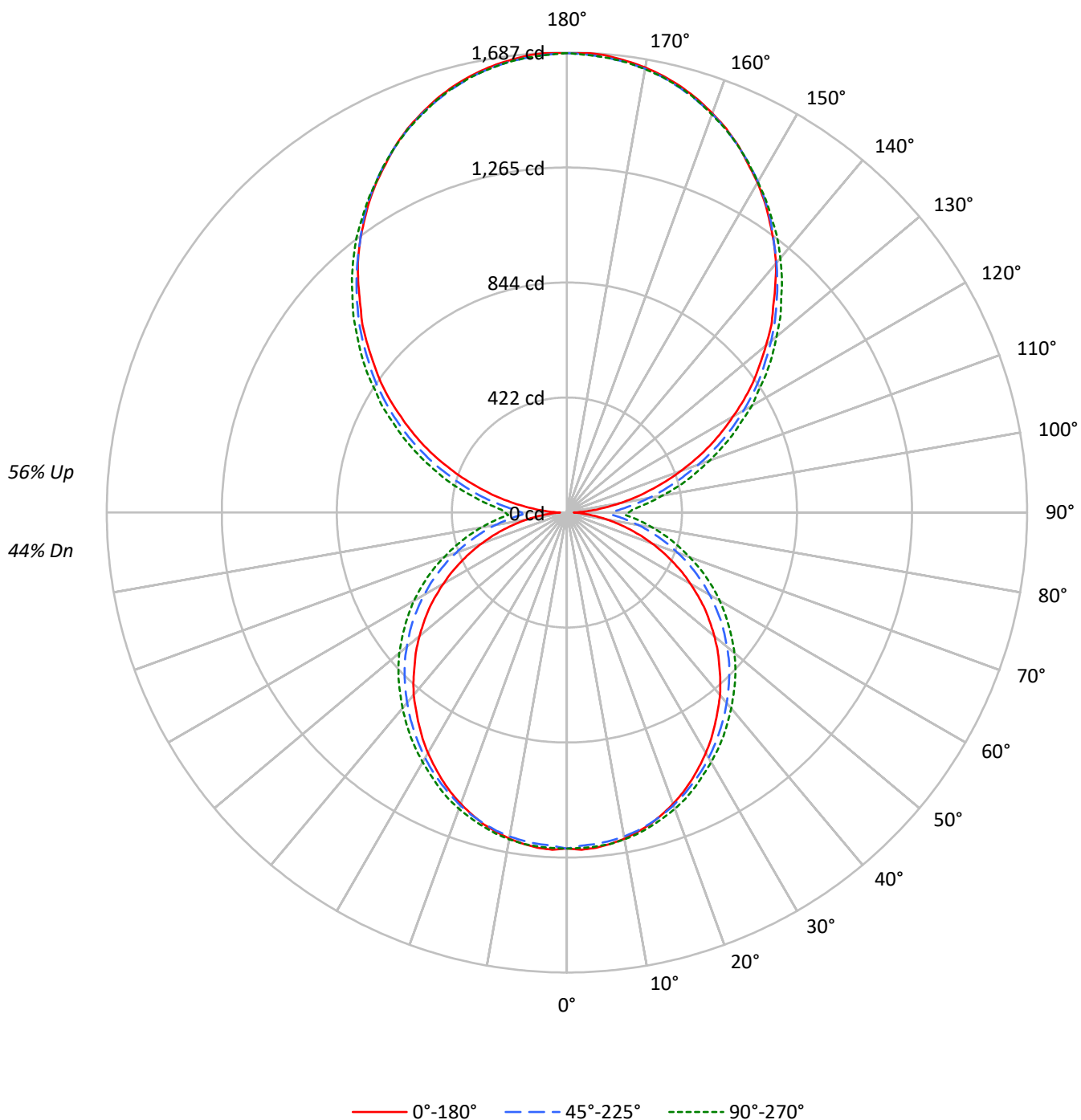
Lumens per Lamp: N/A
Luminaire Lumens: 8880.0 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80		65	65	65		50
1	96	91	87	83	87	83	80	76	69	66	64		55	54	52		43
2	87	79	72	67	79	72	67	62	60	56	52		48	45	43		37
3	79	69	61	55	72	63	57	51	52	47	43		42	39	36		33
4	72	61	53	46	65	56	49	43	46	41	37		37	33	30		29
5	66	54	46	39	60	50	42	37	41	36	31		33	29	26		26
6	61	48	40	34	55	44	37	32	37	31	27		30	26	23		24
7	56	43	35	30	51	40	33	28	33	28	24		27	23	20		22
8	52	39	31	26	47	36	29	24	30	25	21		25	21	18		20
9	48	36	28	23	44	33	26	22	28	22	19		23	19	16		18
10	45	33	25	21	41	30	24	19	26	20	17		21	17	14		17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10050	10050	10050
5°	10078	9788	9806
10°	10012	9595	9568
15°	9919	9379	9300
20°	9779	9145	9040
25°	9623	8887	8759
30°	9454	8630	8472
35°	9263	8368	8217
40°	9108	8117	7953
45°	8881	7881	7720
50°	8689	7613	7474
55°	8487	7355	7190
60°	8177	7033	6923
65°	7834	6686	6602
70°	7420	6291	6231
75°	6841	5850	5877
80°	6186	5403	5507
85°	5319	4951	5207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.3
10°-20°	334.6	3.8
20°-30°	505.9	5.7
30°-40°	612.0	6.9
40°-50°	647.0	7.3
50°-60°	608.9	6.9
60°-70°	505.3	5.7
70°-80°	354.6	4.0
80°-90°	203.5	2.3
90°-100°	228.8	2.6
100°-110°	417.0	4.7
110°-120°	617.9	7.0
120°-130°	770.2	8.7
130°-140°	842.1	9.5
140°-150°	816.3	9.2
150°-160°	684.2	7.7
160°-170°	455.2	5.1
170°-180°	159.4	1.8
0°-30°	957.3	10.8
0°-40°	1569.3	17.7
0°-60°	2825.3	31.8
0°-90°	3888.7	43.8
90°-120°	1263.8	14.2
90°-150°	3692.4	41.6
90°-180°	4991.0	56.2
0°-180°	8880.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1234	1230	1220	1231	1230	117
15°	1183	1184	1180	1192	1191	333
25°	1082	1090	1094	1110	1111	498
35°	947	963	977	996	1001	593
45°	789	816	842	865	872	610
55°	618	647	689	716	725	551
65°	428	472	519	553	564	424
75°	237	288	346	385	398	252
85°	73	131	193	235	248	76
90°	26	96	165	213	227	21
95°	96	153	219	260	273	99
105°	316	345	401	440	454	336
115°	576	589	630	659	668	569
125°	833	832	865	888	894	743
135°	1070	1078	1087	1107	1111	828
145°	1298	1302	1303	1310	1312	812
155°	1485	1485	1484	1489	1484	684
165°	1617	1613	1610	1618	1613	456
175°	1682	1676	1674	1683	1674	160
180°	1685	1685	1685	1685	1685	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1238.0	1233.9	1222.8	1232.5	1231.1
5°	1233.9	1229.7	1220.0	1231.1	1229.7
7.5°	1225.6	1222.8	1214.5	1227.0	1225.6
10°	1214.5	1213.1	1206.2	1218.7	1217.3
12.5°	1199.3	1199.3	1195.2	1206.2	1206.2
15°	1182.8	1184.2	1180.0	1192.4	1191.1
17.5°	1160.7	1164.8	1163.5	1175.9	1174.5
20°	1137.2	1141.4	1142.8	1156.6	1156.6
22.5°	1111.0	1116.5	1119.3	1133.1	1135.9
25°	1082.0	1090.3	1094.5	1109.6	1111.0
27.5°	1050.3	1062.7	1068.2	1082.0	1083.4
30°	1018.5	1029.6	1039.3	1054.4	1057.2
32.5°	984.0	997.8	1008.9	1026.8	1029.6
35°	946.8	963.3	977.1	996.5	1000.6
37.5°	909.5	928.8	945.4	964.7	968.9
40°	873.6	891.6	910.9	931.6	937.1
42.5°	832.2	852.9	876.4	899.9	904.0
45°	789.4	815.7	841.9	865.4	872.3
47.5°	749.4	775.6	806.0	829.5	837.7
50°	705.3	735.6	766.0	793.6	801.9
52.5°	661.1	691.5	727.3	754.9	763.2
55°	618.3	647.3	688.7	716.3	724.6
57.5°	570.0	605.9	645.9	679.0	685.9
60°	523.1	559.0	604.5	636.2	647.3
62.5°	477.5	517.6	563.1	594.8	605.9
65°	427.8	472.0	518.9	553.4	564.5
67.5°	380.9	427.8	477.5	512.0	523.1
70°	332.6	379.5	432.0	469.2	478.9
72.5°	285.7	334.0	390.6	426.5	437.5
75°	237.4	288.5	346.4	385.1	397.5
77.5°	191.8	245.7	306.4	345.0	358.8
80°	150.4	205.6	266.4	307.8	318.8
82.5°	109.0	167.0	227.7	270.5	282.9
85°	73.1	131.1	193.2	234.6	248.4
87.5°	45.5	102.1	162.9	202.9	215.3
90°	26.0	95.5	165.3	213.2	226.8
92.5°	54.6	119.8	185.7	228.2	240.5
95°	96.1	153.4	219.1	260.2	272.7
97.5°	141.7	192.1	259.1	300.2	312.6
100°	197.6	238.7	304.2	344.2	353.8
102.5°	257.5	289.1	352.1	391.9	404.2
105°	316.0	344.9	401.2	439.6	454.5
107.5°	379.8	404.6	454.2	493.9	502.3
110°	443.6	465.6	512.6	541.7	556.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	510.0	526.5	569.5	599.8	610.9
115°	576.4	588.8	630.4	659.4	667.8
117.5°	640.2	648.5	688.6	713.6	720.8
120°	702.7	712.0	748.2	769.3	782.9
122.5°	769.1	770.4	806.4	830.1	833.2
125°	832.9	831.5	864.7	888.4	893.9
127.5°	891.5	894.0	919.0	941.3	949.6
130°	952.6	955.2	977.2	999.5	1002.6
132.5°	1016.5	1017.8	1033.0	1053.9	1060.9
135°	1069.9	1077.7	1087.3	1106.8	1111.2
137.5°	1131.1	1133.6	1141.8	1158.5	1166.7
140°	1192.4	1193.6	1195.0	1211.6	1217.2
142.5°	1247.0	1249.6	1246.9	1262.1	1267.6
145°	1297.8	1301.6	1302.9	1309.9	1311.5
147.5°	1349.9	1355.0	1353.7	1353.8	1358.0
150°	1396.8	1400.7	1400.7	1400.7	1399.3
152.5°	1439.7	1442.3	1443.6	1447.6	1443.6
155°	1485.3	1485.3	1484.0	1489.3	1484.0
157.5°	1524.4	1521.8	1521.8	1525.7	1521.8
160°	1558.3	1557.0	1555.7	1559.6	1553.1
162.5°	1589.6	1585.7	1584.4	1592.2	1585.7
165°	1616.9	1613.0	1610.4	1618.2	1613.0
167.5°	1639.1	1633.9	1633.9	1641.7	1633.9
170°	1657.3	1650.8	1652.1	1659.9	1650.8
172.5°	1670.4	1665.1	1665.1	1674.3	1665.1
175°	1682.1	1675.6	1674.3	1683.4	1674.3
177.5°	1687.3	1680.8	1680.8	1689.9	1679.5
180°	1684.7	1684.7	1684.7	1684.7	1684.7

(END OF REPORT)