

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: P1032472

Luminaire Tested: S124DIW-B1020D1050UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032472
REPORT IS A COMBINATION OF REPORTS P996639 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1050UB2750-4F0-XX-W2A-D_3500K
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

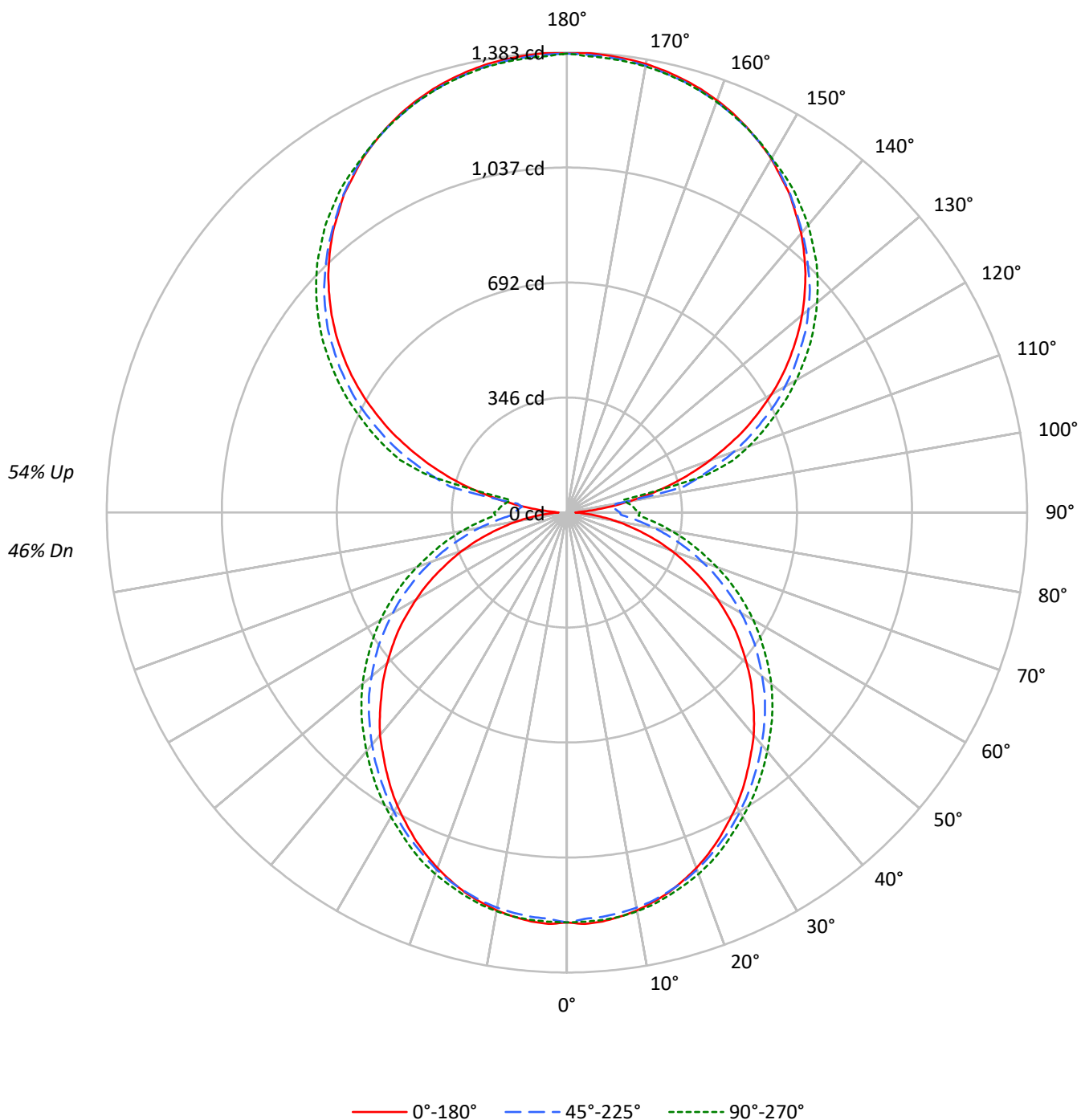
Lumens per Lamp: N/A
Luminaire Lumens: 8474.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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

TEST NUMBER: P1032472

CATALOG NUMBER: S124DIW-B1020D1050UB2750-4F0-XX-W2A-D_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1032472

CATALOG NUMBER: S124DIW-B1020D1050UB2750-4F0-XX-W2A-D_3500K

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	81	81	81		66	66	66		52
1	96	91	87	83	88	84	80	77	70	67	65		57	55	53		45
2	87	79	73	67	79	73	67	62	60	56	53		49	46	44		39
3	79	69	62	55	72	64	57	52	53	48	44		43	40	36		34
4	72	61	53	47	66	56	49	43	47	41	37		38	34	31		30
5	66	54	46	40	60	50	42	37	42	36	32		34	30	27		27
6	61	48	40	34	55	45	37	32	37	32	27		31	26	23		25
7	56	44	36	30	51	40	33	28	34	28	24		28	24	20		22
8	52	40	32	26	48	37	29	25	31	25	21		25	21	18		20
9	48	36	28	23	44	33	26	22	28	23	19		23	19	16		19
10	45	33	26	21	41	31	24	20	26	21	17		22	17	15		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

TEST NUMBER: P1032472

CATALOG NUMBER: S124DIW-B1020D1050UB2750-4F0-XX-W2A-D_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.4
10°-20°	334.6	3.9
20°-30°	505.9	6.0
30°-40°	612.0	7.2
40°-50°	647.0	7.6
50°-60°	608.9	7.2
60°-70°	505.3	6.0
70°-80°	354.6	4.2
80°-90°	202.8	2.4
90°-100°	164.8	1.9
100°-110°	389.7	4.6
110°-120°	635.1	7.5
120°-130°	764.4	9.0
130°-140°	796.5	9.4
140°-150°	734.2	8.7
150°-160°	589.8	7.0
160°-170°	380.4	4.5
170°-180°	131.1	1.5
0°-30°	957.3	11.3
0°-40°	1569.3	18.5
0°-60°	2825.3	33.3
0°-90°	3887.9	45.9
90°-120°	1189.6	14.0
90°-150°	3484.8	41.1
90°-180°	4586.0	54.1
0°-180°	8474.0	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°	25	92	159	206	219	18
95°	75	85	143	186	200	84
105°	323	357	413	457	431	339
115°	588	604	647	679	689	580
125°	821	823	856	885	894	733
135°	1014	1013	1027	1051	1061	782
145°	1168	1169	1169	1178	1186	730
155°	1278	1280	1276	1281	1278	590
165°	1349	1344	1344	1352	1342	381
175°	1380	1374	1374	1384	1371	131
180°	1380	1380	1380	1380	1380	

TEST NUMBER: P1032472

CATALOG NUMBER: S124DIW-B1020D1050UB2750-4F0-XX-W2A-D_3500K

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°	25.2	91.7	159.3	205.6	218.7
92.5°	36.2	82.4	150.1	194.9	205.9
95°	74.7	85.2	142.8	186.2	199.7
97.5°	125.0	187.7	135.9	177.0	190.4
100°	184.4	238.9	150.3	170.1	180.7
102.5°	252.5	295.2	360.1	163.8	174.8
105°	323.0	356.8	413.1	456.8	430.7
107.5°	390.1	416.7	472.2	511.9	525.7
110°	456.8	479.3	533.8	567.5	581.7

TEST NUMBER: P1032472

CATALOG NUMBER: S124DIW-B1020D1050UB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	521.5	544.2	591.9	621.1	636.4
115°	588.2	603.7	646.9	679.3	689.0
117.5°	649.1	661.5	706.0	733.9	745.0
120°	709.6	717.9	756.9	786.6	795.5
122.5°	767.4	769.5	808.8	837.5	845.0
125°	820.7	823.4	855.9	885.3	894.5
127.5°	873.3	873.0	905.7	929.6	938.2
130°	922.5	922.2	947.3	973.3	981.6
132.5°	968.9	969.7	990.3	1014.9	1022.1
135°	1014.1	1013.0	1026.8	1050.9	1061.3
137.5°	1055.3	1053.9	1064.6	1087.4	1093.2
140°	1095.6	1096.3	1099.7	1120.7	1128.6
142.5°	1130.3	1134.4	1134.1	1151.3	1156.8
145°	1167.5	1169.1	1169.1	1178.5	1186.0
147.5°	1196.3	1201.1	1200.1	1202.5	1209.1
150°	1228.3	1231.1	1230.0	1230.0	1231.1
152.5°	1253.8	1256.9	1254.8	1256.9	1255.8
155°	1278.5	1279.6	1276.5	1280.6	1277.5
157.5°	1300.2	1300.2	1296.1	1301.2	1296.1
160°	1318.8	1315.7	1314.6	1320.8	1314.6
162.5°	1335.3	1331.2	1330.1	1336.3	1329.1
165°	1348.7	1343.5	1343.5	1351.8	1342.5
167.5°	1360.1	1354.9	1353.9	1363.1	1352.8
170°	1369.3	1363.1	1364.2	1372.4	1362.1
172.5°	1375.5	1369.3	1370.4	1378.6	1367.3
175°	1379.7	1373.5	1374.5	1383.8	1371.4
177.5°	1382.8	1375.5	1377.6	1385.9	1373.5
180°	1379.7	1379.7	1379.7	1379.7	1379.7

(END OF REPORT)