

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: P1033104

Luminaire Tested: S124DIW-B1020D1050UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033104
REPORT IS A COMBINATION OF REPORTS P996662 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1050UB35-4F0-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

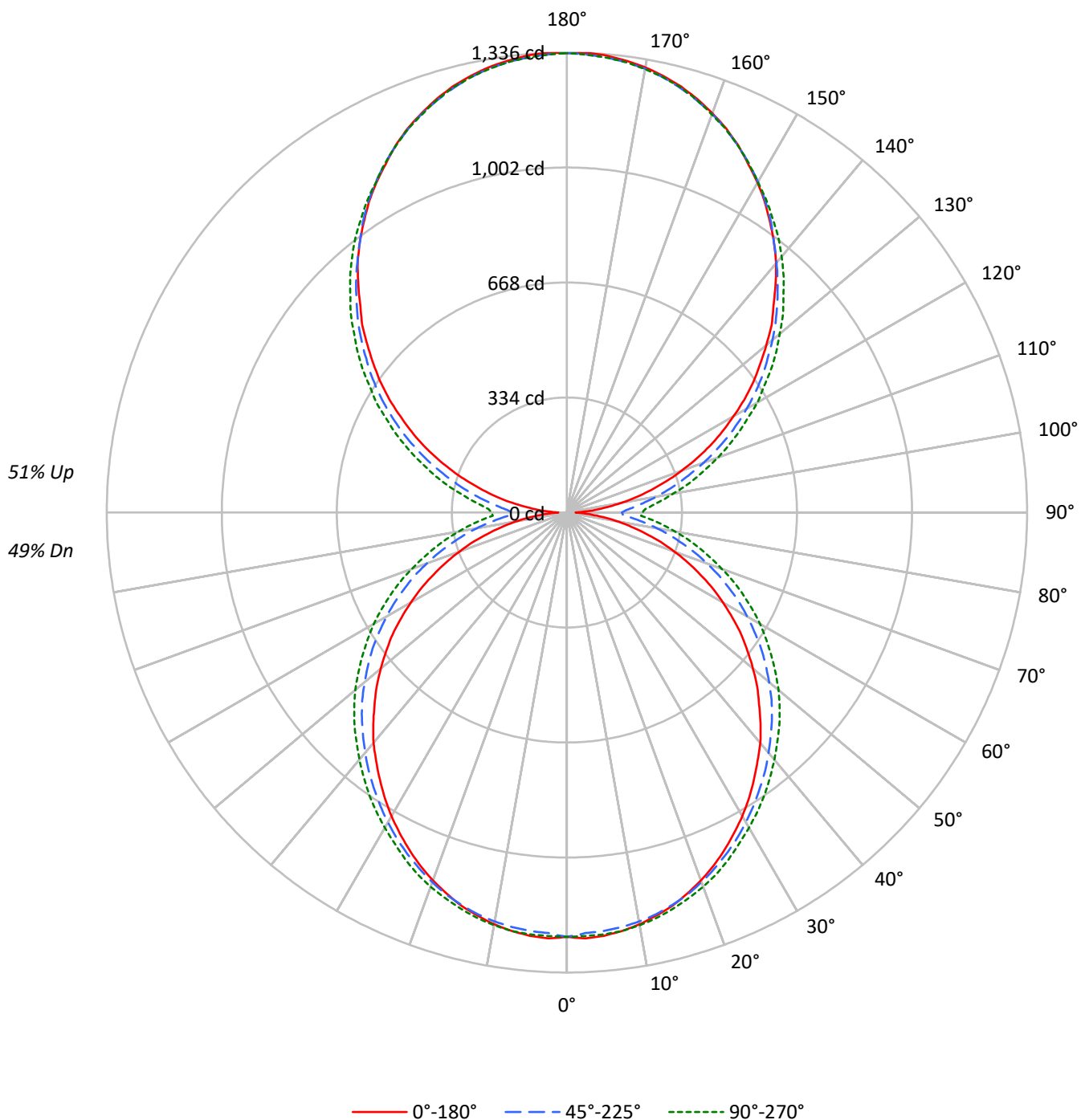
Lumens per Lamp: N/A
Luminaire Lumens: 7907.0 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1033104

CATALOG NUMBER: S124DIW-B1020D1050UB35-4F0-XX-W2A-D1

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55	49		
1	97	92	88	84	89	85	81	78	71	68	66	59	57	55	47	46	45	39		
2	88	80	73	68	80	73	68	63	62	57	54	51	48	45	41	39	37	32		
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31	27		
4	73	61	53	47	66	57	49	44	48	42	38	40	35	32	32	29	26	23		
5	67	55	46	40	61	50	43	37	43	37	32	35	31	28	29	25	23	19		
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	23	20	17		
7	57	44	36	30	52	41	33	28	35	29	25	29	24	21	24	20	18	15		
8	52	40	32	26	48	37	30	25	32	26	22	26	22	19	22	18	16	13		
9	49	36	29	23	45	34	27	22	29	23	19	24	20	17	20	17	14	12		
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	18	15	13	11		

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: P1033104

CATALOG NUMBER: S124DIW-B1020D1050UB35-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.5
10°-20°	334.6	4.2
20°-30°	505.9	6.4
30°-40°	612.0	7.7
40°-50°	647.0	8.2
50°-60°	608.9	7.7
60°-70°	505.3	6.4
70°-80°	354.6	4.5
80°-90°	202.8	2.6
90°-100°	206.0	2.6
100°-110°	348.6	4.4
110°-120°	501.7	6.3
120°-130°	616.9	7.8
130°-140°	669.9	8.5
140°-150°	647.1	8.2
150°-160°	541.9	6.9
160°-170°	360.6	4.6
170°-180°	126.3	1.6
0°-30°	957.3	12.1
0°-40°	1569.3	19.8
0°-60°	2825.3	35.7
0°-90°	3887.9	49.2
90°-120°	1056.3	13.4
90°-150°	2990.3	37.8
90°-180°	4019.0	50.8
0°-180°	7907.0	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	20
95°	80	135	198	239	251	81
105°	253	282	337	374	388	269
115°	458	471	513	542	551	453
125°	661	659	693	717	723	589
135°	848	854	864	884	889	656
145°	1028	1031	1032	1039	1042	644
155°	1176	1176	1175	1180	1175	541
165°	1281	1278	1276	1282	1278	361
175°	1332	1327	1326	1333	1326	126
180°	1334	1334	1334	1334	1334	

TEST NUMBER: P1033104

CATALOG NUMBER: S124DIW-B1020D1050UB35-4F0-XX-W2A-D1

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°	47.5	109.2	173.8	215.5	227.5
95°	79.8	134.7	198.5	238.8	251.3
97.5°	115.7	163.9	228.8	268.8	281.2
100°	159.7	199.7	262.8	302.1	311.7
102.5°	207.1	238.5	299.2	338.2	350.3
105°	252.8	281.5	336.7	374.3	388.4
107.5°	303.4	327.9	377.3	415.9	424.6
110°	353.6	375.1	422.3	452.0	466.2

TEST NUMBER: P1033104

CATALOG NUMBER: S124DIW-B1020D1050UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	406.0	422.5	466.0	496.3	507.4
115°	458.2	470.6	512.8	542.0	550.7
117.5°	508.8	517.1	557.5	583.3	591.3
120°	558.0	566.2	603.2	625.6	638.7
122.5°	610.6	611.6	647.9	672.4	676.8
125°	660.8	659.4	692.8	717.1	723.2
127.5°	707.2	708.9	734.4	757.3	765.8
130°	755.3	757.1	779.1	802.0	806.1
132.5°	805.9	806.7	822.1	843.6	850.8
135°	847.9	854.1	863.7	883.8	889.0
137.5°	896.5	898.1	905.7	923.3	931.2
140°	945.0	945.6	947.0	963.9	969.8
142.5°	987.9	990.0	987.6	1002.8	1008.3
145°	1028.2	1030.9	1031.9	1039.2	1041.6
147.5°	1069.4	1073.2	1072.2	1072.5	1077.0
150°	1106.6	1109.3	1109.3	1109.3	1108.3
152.5°	1140.3	1142.3	1143.4	1146.5	1143.4
155°	1176.4	1176.4	1175.4	1179.5	1175.4
157.5°	1207.4	1205.3	1205.3	1208.4	1205.3
160°	1234.2	1233.2	1232.1	1235.2	1230.1
162.5°	1259.0	1255.9	1254.8	1261.0	1255.9
165°	1280.6	1277.5	1275.5	1281.7	1277.5
167.5°	1298.2	1294.0	1294.0	1300.2	1294.0
170°	1312.6	1307.5	1308.5	1314.7	1307.5
172.5°	1322.9	1318.8	1318.8	1326.0	1318.8
175°	1332.2	1327.1	1326.0	1333.3	1326.0
177.5°	1336.3	1331.2	1331.2	1338.4	1330.2
180°	1334.3	1334.3	1334.3	1334.3	1334.3

(END OF REPORT)