

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: P1034038

Luminaire Tested: S124RDIW-B350D1050UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034038
REPORT IS A COMBINATION OF REPORTS P1000300 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1050UB50-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

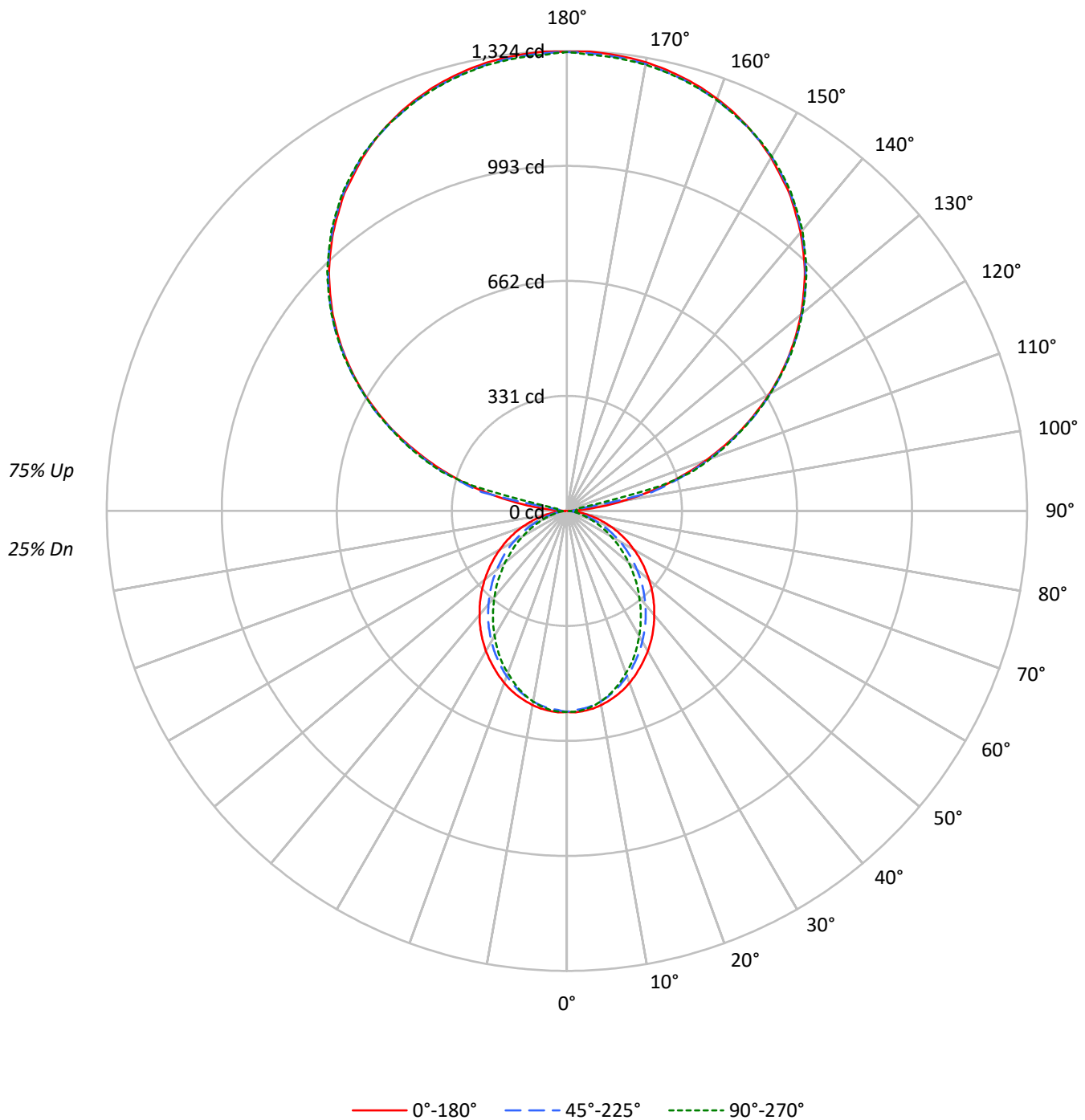
Lumens per Lamp: N/A
Luminaire Lumens: 5427.0 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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: P1034038

CATALOG NUMBER: S124RDIW-B350D1050UB50-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1034038

CATALOG NUMBER: S124RDIW-B350D1050UB50-4F0-XX-W2A-F

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
RCR																	
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	81	82	79	76	73	61	59	57	44	43	42	29	29	28
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	23	22	20
4	70	60	52	47	62	54	47	42	42	37	34	31	28	26	21	19	18
5	64	53	46	40	57	48	41	36	37	33	29	28	25	22	19	17	15
6	59	48	40	34	52	43	36	31	34	29	25	25	22	19	17	15	13
7	55	43	35	30	48	39	32	27	30	26	22	23	19	17	15	13	12
8	50	39	31	26	45	35	29	24	28	23	20	21	17	15	14	12	11
9	47	35	28	23	42	32	26	21	25	21	17	19	16	14	13	11	10
10	44	32	25	21	39	29	23	19	23	19	16	17	14	12	12	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4719	4579	4579
10°	4679	4434	4381
15°	4615	4254	4148
20°	4530	4049	3882
25°	4426	3827	3622
30°	4323	3602	3331
35°	4209	3373	3045
40°	4075	3127	2752
45°	3948	2882	2462
50°	3804	2616	2168
55°	3649	2342	1864
60°	3477	2051	1564
65°	3311	1719	1275
70°	3074	1367	974
75°	2769	995	682
80°	2316	610	491
85°	1739	351	268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3948 cd/sqm

TEST NUMBER: P1034038

CATALOG NUMBER: S124RDIW-B350D1050UB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.0
10°-20°	151.7	2.8
20°-30°	219.0	4.0
30°-40°	248.2	4.6
40°-50°	239.7	4.4
50°-60°	199.3	3.7
60°-70°	137.5	2.5
70°-80°	69.5	1.3
80°-90°	20.4	0.4
90°-100°	43.8	0.8
100°-110°	288.8	5.3
110°-120°	551.4	10.2
120°-130°	700.0	12.9
130°-140°	748.8	13.8
140°-150°	700.2	12.9
150°-160°	564.7	10.4
160°-170°	364.2	6.7
170°-180°	125.5	2.3
0°-30°	425.2	7.8
0°-40°	673.4	12.4
0°-60°	1112.3	20.5
0°-90°	1339.7	24.7
90°-120°	884.0	16.3
90°-150°	3033.0	55.9
90°-180°	4087.0	75.3
0°-180°	5427.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	579	579	579	579	579	
5°	578	576	571	575	574	55
15°	550	546	535	534	531	155
25°	498	490	471	464	460	229
35°	430	416	394	379	371	269
45°	351	334	308	286	278	271
55°	266	248	219	196	188	238
65°	181	162	133	114	109	179
75°	96	80	59	49	46	101
85°	24	15	14	13	13	26
90°	3	14	22	28	30	4
95°	54	21	22	28	29	67
105°	297	303	308	317	282	311
115°	555	558	557	559	559	546
125°	780	784	782	785	786	697
135°	968	967	971	973	975	746
145°	1116	1119	1119	1120	1122	698
155°	1224	1225	1222	1226	1223	564
165°	1291	1286	1286	1294	1285	365
175°	1321	1315	1316	1325	1313	126
180°	1321	1321	1321	1321	1321	

TEST NUMBER: P1034038

CATALOG NUMBER: S124RDIW-B350D1050UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	578.6	578.6	578.6	578.6	578.6
2.5°	580.4	578.6	573.8	578.6	578.2
5°	577.7	576.0	570.7	575.1	574.2
7.5°	573.8	572.0	565.3	568.4	567.1
10°	567.6	565.3	557.4	559.1	557.4
12.5°	559.6	556.9	547.2	548.1	545.4
15°	550.3	546.3	535.2	534.3	531.2
17.5°	539.6	533.9	521.0	518.8	514.4
20°	526.8	521.0	506.0	502.4	496.7
22.5°	512.6	506.0	489.6	483.8	479.4
25°	497.6	489.6	471.4	463.9	459.5
27.5°	482.0	472.3	453.3	444.4	438.2
30°	465.7	454.6	433.8	422.7	415.6
32.5°	448.4	435.5	413.8	400.5	393.9
35°	430.2	416.0	393.9	378.8	370.8
37.5°	411.2	396.5	372.2	355.8	347.8
40°	390.8	376.2	350.9	332.3	324.3
42.5°	371.3	355.8	329.2	310.1	301.7
45°	350.9	334.5	307.9	286.2	278.2
47.5°	330.1	313.2	285.8	263.2	254.3
50°	308.8	291.5	263.2	241.0	232.6
52.5°	287.1	270.3	241.0	218.4	209.6
55°	265.8	248.1	219.3	196.3	187.9
57.5°	245.0	226.4	198.0	174.6	168.4
60°	222.4	204.7	176.3	153.3	146.2
62.5°	202.0	183.4	154.2	133.4	128.0
65°	180.8	161.7	133.4	114.3	109.0
67.5°	158.6	140.4	113.9	97.0	90.8
70°	137.8	119.2	93.9	79.3	74.9
72.5°	115.6	99.2	75.8	63.8	59.8
75°	96.1	79.8	58.9	48.7	46.1
77.5°	75.8	61.6	43.9	36.8	35.9
80°	56.3	43.4	30.1	28.8	28.4
82.5°	39.4	27.9	21.7	20.8	20.4
85°	23.9	15.1	13.7	12.8	12.8
87.5°	10.2	6.6	6.2	5.8	6.2
90°	3.0	13.8	21.7	27.7	29.6
92.5°	14.8	12.8	20.7	26.7	26.7
95°	54.3	20.7	21.7	27.7	28.7
97.5°	103.7	125.5	21.7	26.7	27.7
100°	162.0	179.8	43.5	26.7	27.7
102.5°	227.2	239.1	250.9	28.7	28.7
105°	297.4	303.3	308.2	317.1	281.6
107.5°	361.6	364.6	371.5	376.4	380.4
110°	426.8	429.8	435.7	437.7	440.6

TEST NUMBER: P1034038

CATALOG NUMBER: S124RDIW-B350D1050UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	490.0	495.9	497.9	496.9	500.9
115°	555.2	558.2	557.2	559.2	559.2
117.5°	613.5	617.5	620.4	619.4	619.4
120°	672.8	676.7	675.8	677.7	675.8
122.5°	728.1	730.1	732.1	733.1	731.1
125°	780.5	784.4	782.5	785.4	786.4
127.5°	830.9	831.8	836.8	835.8	834.8
130°	879.3	880.3	883.2	884.2	884.2
132.5°	923.7	925.7	929.7	930.6	929.7
135°	968.2	967.2	971.1	973.1	975.1
137.5°	1007.7	1007.7	1012.6	1014.6	1013.6
140°	1046.2	1048.2	1050.2	1053.1	1054.1
142.5°	1080.8	1084.8	1085.8	1087.7	1087.7
145°	1116.4	1119.3	1119.3	1120.3	1122.3
147.5°	1144.0	1150.0	1149.0	1150.0	1151.0
150°	1174.7	1178.6	1177.6	1177.6	1178.6
152.5°	1200.4	1203.3	1201.3	1203.3	1202.3
155°	1224.1	1225.1	1222.1	1226.0	1223.1
157.5°	1244.8	1244.8	1240.9	1245.8	1240.9
160°	1262.6	1259.6	1258.6	1264.6	1258.6
162.5°	1278.4	1274.4	1273.5	1279.4	1272.5
165°	1291.2	1286.3	1286.3	1294.2	1285.3
167.5°	1302.1	1297.2	1296.2	1305.1	1295.2
170°	1311.0	1305.1	1306.1	1314.0	1304.1
172.5°	1316.9	1311.0	1312.0	1319.9	1309.0
175°	1320.9	1315.0	1315.9	1324.8	1313.0
177.5°	1323.8	1316.9	1318.9	1326.8	1315.0
180°	1320.9	1320.9	1320.9	1320.9	1320.9

(END OF REPORT)