

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: P1032944

Luminaire Tested: S124RDIW-B350D1050UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032944
REPORT IS A COMBINATION OF REPORTS P1000272 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1050UB2750-4F0-XX-W2A-F1_5000K
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

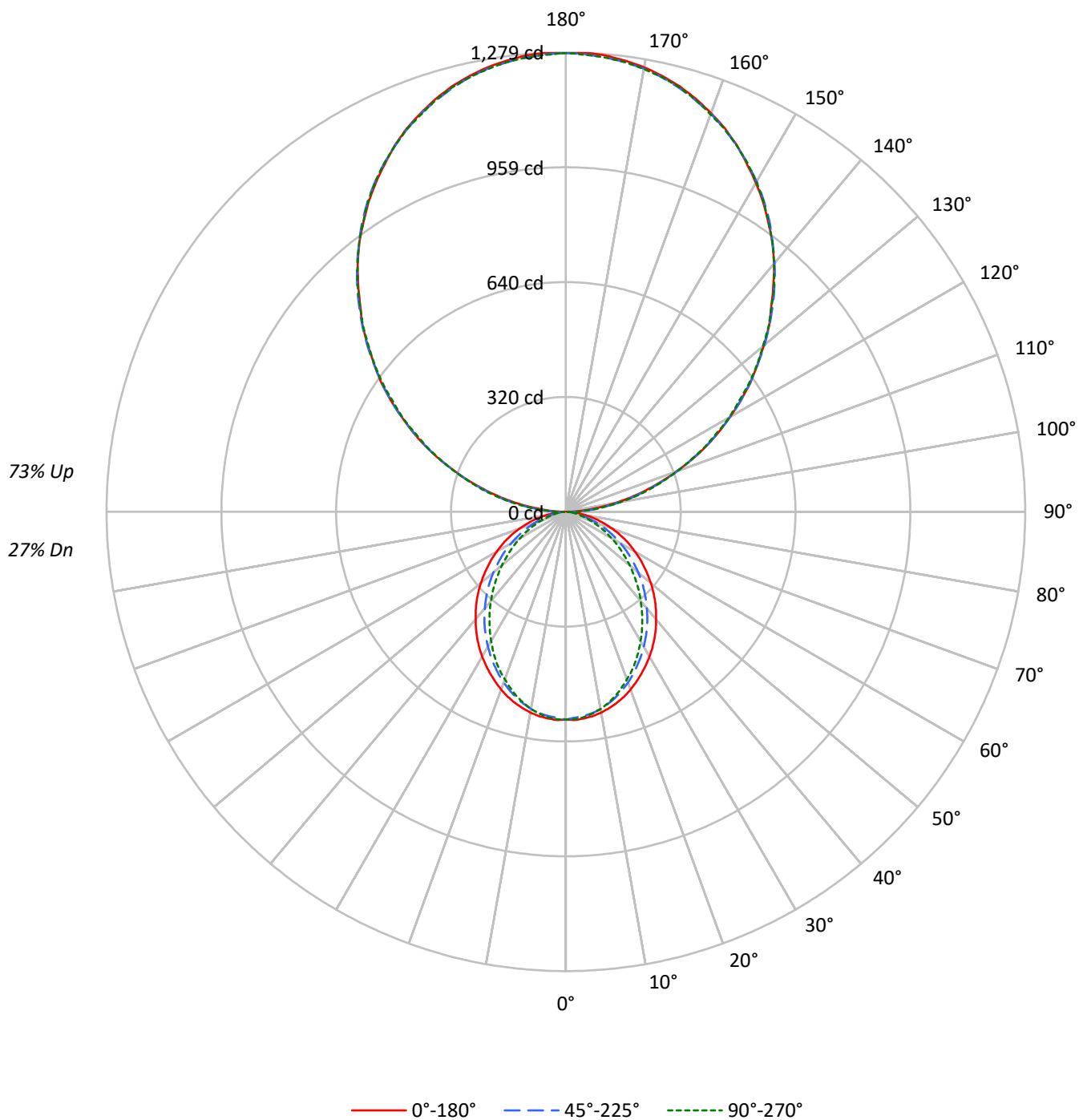
Lumens per Lamp: N/A
Luminaire Lumens: 4884.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1032944

CATALOG NUMBER: S124RDIW-B350D1050UB2750-4F0-XX-W2A-F1_5000K

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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35			27
1	93	89	85	82	83	79	76	74	62	60	58	46	45	44	31	31	30			23
2	85	78	72	67	75	70	65	61	55	51	48	41	39	37	28	27	26			20
3	77	68	61	56	69	61	55	51	48	44	41	36	33	31	25	23	22			17
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	22	20	19			15
5	65	54	46	40	58	48	42	37	38	33	30	29	26	23	20	18	17			13
6	60	48	40	35	53	43	37	32	34	30	26	26	23	20	18	16	15			11
7	55	43	36	30	49	39	32	28	31	26	23	24	20	18	17	15	13			10
8	51	39	32	27	45	35	29	24	28	24	20	22	18	16	15	13	12			9
9	47	36	28	24	42	32	26	22	26	21	18	20	17	14	14	12	10			8
10	44	33	26	21	39	30	23	19	24	19	16	18	15	13	13	11	10			7

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: P1032944

CATALOG NUMBER: S124RDIW-B350D1050UB2750-4F0-XX-W2A-F1_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.1
10°-20°	151.7	3.1
20°-30°	219.0	4.5
30°-40°	248.2	5.1
40°-50°	239.7	4.9
50°-60°	199.3	4.1
60°-70°	137.5	2.8
70°-80°	69.5	1.4
80°-90°	20.4	0.4
90°-100°	83.3	1.7
100°-110°	249.4	5.1
110°-120°	423.7	8.7
120°-130°	558.7	11.4
130°-140°	627.6	12.8
140°-150°	616.8	12.6
150°-160°	518.8	10.6
160°-170°	345.2	7.1
170°-180°	120.9	2.5
0°-30°	425.2	8.7
0°-40°	673.4	13.8
0°-60°	1112.3	22.8
0°-90°	1339.7	27.4
90°-120°	756.3	15.5
90°-150°	2559.4	52.4
90°-180°	3544.0	72.6
0°-180°	4884.0	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	6
95°	59	68	75	78	78	64
105°	230	231	235	238	241	244
115°	431	431	429	428	427	425
125°	627	627	626	624	622	559
135°	809	815	815	813	810	626
145°	983	987	988	987	984	615
155°	1126	1126	1125	1129	1125	518
165°	1226	1223	1221	1227	1223	346
175°	1275	1270	1270	1276	1270	121
180°	1277	1277	1277	1277	1277	

TEST NUMBER: P1032944

CATALOG NUMBER: S124RDIW-B350D1050UB2750-4F0-XX-W2A-F1_5000K

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°	25.7	38.5	43.5	46.4	47.4
95°	59.3	68.2	75.1	78.0	78.0
97.5°	94.8	102.7	110.6	114.6	114.6
100°	138.3	142.3	151.2	153.1	153.1
102.5°	183.8	184.7	192.6	195.6	196.6
105°	230.2	231.2	235.1	238.1	241.1
107.5°	278.6	279.6	280.6	284.5	283.5
110°	328.0	330.0	329.0	327.0	330.0

TEST NUMBER: P1032944

CATALOG NUMBER: S124RDIW-B350D1050UB2750-4F0-XX-W2A-F1_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.4	379.4	377.4	377.4	377.4
115°	430.7	430.7	428.8	427.8	426.8
117.5°	479.1	479.1	478.2	475.2	472.2
120°	527.6	531.5	528.5	523.6	525.6
122.5°	577.9	578.9	577.9	575.0	570.0
125°	627.3	627.3	626.3	624.4	622.4
127.5°	671.8	674.8	672.8	670.8	669.8
130°	719.2	722.2	722.2	720.2	716.2
132.5°	767.6	769.6	768.6	766.6	765.6
135°	809.1	815.0	815.0	813.1	810.1
137.5°	855.5	858.5	860.5	857.5	858.5
140°	902.0	903.9	903.9	903.0	902.0
142.5°	944.5	946.4	945.4	945.4	945.4
145°	983.0	986.9	987.9	986.9	984.0
147.5°	1022.5	1027.4	1026.5	1025.5	1024.5
150°	1058.1	1062.0	1062.0	1062.0	1061.0
152.5°	1091.7	1093.6	1094.6	1097.6	1094.6
155°	1126.2	1126.2	1125.2	1129.2	1125.2
157.5°	1155.9	1153.9	1153.9	1156.9	1153.9
160°	1181.6	1180.6	1179.6	1182.5	1177.6
162.5°	1205.3	1202.3	1201.3	1207.2	1202.3
165°	1226.0	1223.0	1221.1	1227.0	1223.0
167.5°	1242.8	1238.9	1238.9	1244.8	1238.9
170°	1256.6	1251.7	1252.7	1258.6	1251.7
172.5°	1266.5	1262.6	1262.6	1269.5	1262.6
175°	1275.4	1270.5	1269.5	1276.4	1269.5
177.5°	1279.4	1274.4	1274.4	1281.3	1273.4
180°	1277.4	1277.4	1277.4	1277.4	1277.4

(END OF REPORT)