

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: P1033412

Luminaire Tested: S124DIW-B350D1050UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033412
REPORT IS A COMBINATION OF REPORTS P997343 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

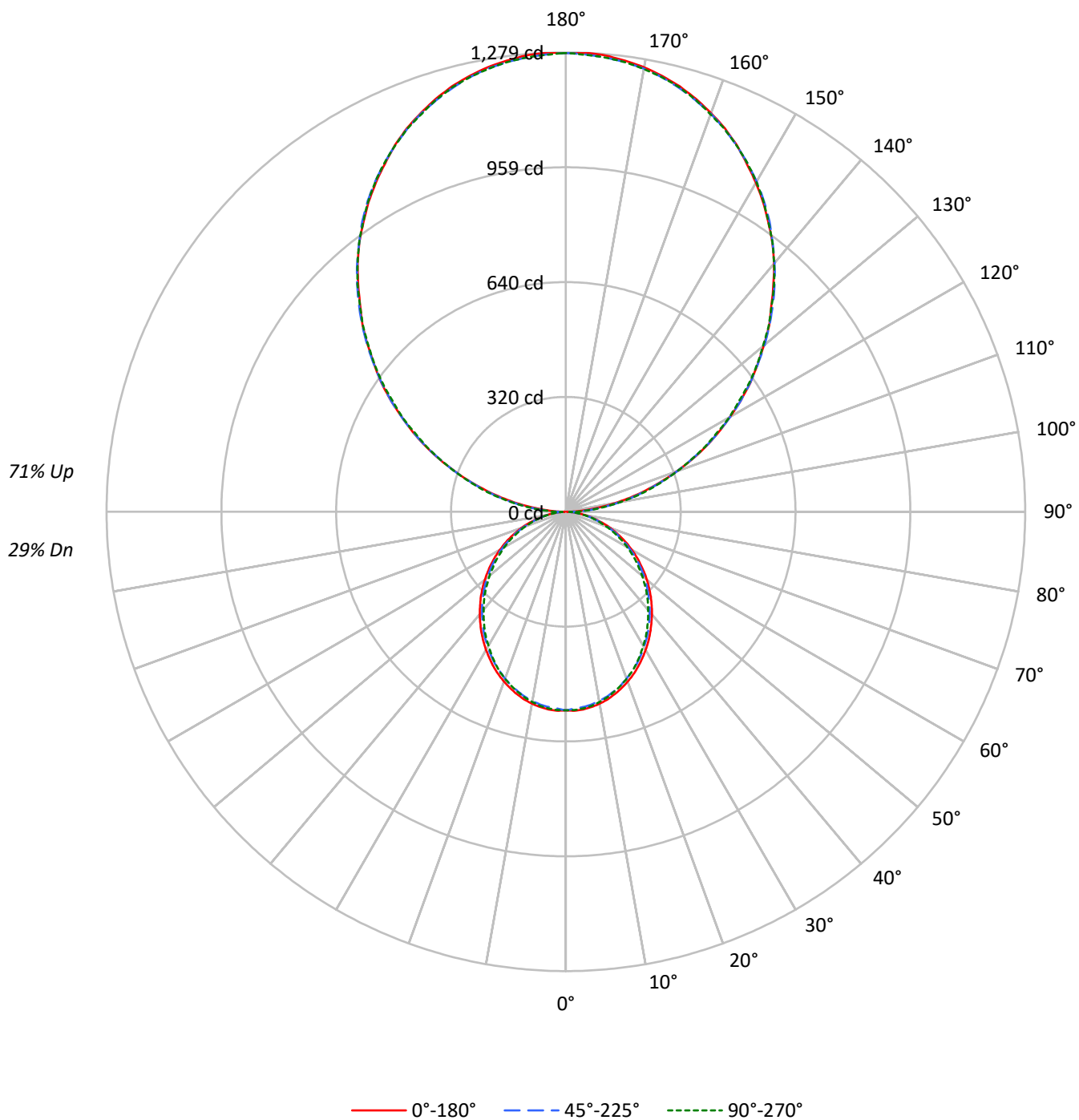
Lumens per Lamp: N/A
Luminaire Lumens: 4966.0 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1033412

CATALOG NUMBER: S124DIW-B350D1050UB50-4F0-XX-W2A-F1

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
RCR																	
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	93	89	85	82	83	80	76	74	62	60	58	47	45	44	32	31	31
2	85	77	72	67	75	70	65	60	55	51	48	41	39	37	28	27	26
3	77	68	61	55	69	61	55	50	48	44	41	36	33	31	25	23	22
4	70	60	52	47	63	54	48	43	43	38	34	32	29	27	22	20	19
5	65	53	46	40	58	48	41	36	38	33	30	29	26	23	20	18	16
6	59	48	40	34	53	43	36	31	34	29	26	26	23	20	18	16	14
7	55	43	35	30	49	39	32	27	31	26	22	24	20	18	17	14	13
8	51	39	31	26	45	35	29	24	28	23	20	21	18	16	15	13	11
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10
10	44	32	25	21	39	29	23	19	24	19	16	18	15	13	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4509	4509	4509
5°	4512	4379	4384
10°	4474	4257	4227
15°	4409	4112	4050
20°	4327	3956	3867
25°	4235	3791	3671
30°	4124	3612	3454
35°	4009	3430	3245
40°	3889	3233	3023
45°	3763	3036	2815
50°	3623	2844	2585
55°	3472	2621	2356
60°	3317	2376	2118
65°	3139	2124	1849
70°	2936	1819	1563
75°	2631	1466	1251
80°	2242	1061	879
85°	1739	589	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3763 cd/sqm

TEST NUMBER: P1033412

CATALOG NUMBER: S124DIW-B350D1050UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.0
10°-20°	146.8	3.0
20°-30°	216.1	4.4
30°-40°	251.2	5.1
40°-50°	251.1	5.1
50°-60°	219.6	4.4
60°-70°	163.1	3.3
70°-80°	92.5	1.9
80°-90°	29.2	0.6
90°-100°	83.3	1.7
100°-110°	249.4	5.0
110°-120°	423.7	8.5
120°-130°	558.7	11.3
130°-140°	627.6	12.6
140°-150°	616.8	12.4
150°-160°	518.8	10.4
160°-170°	345.2	7.0
170°-180°	120.9	2.4
0°-30°	415.0	8.4
0°-40°	666.1	13.4
0°-60°	1136.9	22.9
0°-90°	1421.7	28.6
90°-120°	756.3	15.2
90°-150°	2559.4	51.5
90°-180°	3544.0	71.4
0°-180°	4966.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	552	551	546	551	550	52
15°	526	524	517	520	519	148
25°	476	473	467	467	466	219
35°	410	407	400	397	395	256
45°	334	331	324	319	318	258
55°	253	252	245	240	237	227
65°	171	169	165	160	158	170
75°	91	89	87	85	85	97
85°	24	24	23	23	23	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: P1033412

CATALOG NUMBER: S124DIW-B350D1050UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.9	552.9	552.9	552.9	552.9
2.5°	554.6	553.3	548.4	552.9	552.4
5°	552.4	550.6	545.8	550.6	549.8
7.5°	548.4	546.6	541.3	545.3	544.9
10°	542.7	540.9	535.1	538.7	537.8
12.5°	535.1	533.4	527.2	531.1	529.8
15°	525.8	524.1	517.4	520.1	518.7
17.5°	515.2	513.0	506.8	508.6	507.7
20°	503.2	501.0	494.4	495.7	494.8
22.5°	490.4	487.3	480.6	483.3	481.5
25°	476.2	473.1	466.9	467.4	465.6
27.5°	460.3	457.2	451.4	450.5	448.3
30°	444.3	440.8	435.0	433.2	431.0
32.5°	427.5	424.4	418.2	416.0	413.8
35°	409.8	406.7	400.5	397.4	395.1
37.5°	391.2	388.5	381.9	378.8	375.7
40°	373.0	369.5	362.8	358.4	356.2
42.5°	353.5	351.7	344.2	338.9	337.6
45°	334.5	331.4	324.3	319.4	318.1
47.5°	314.5	312.3	305.7	300.3	296.8
50°	294.1	292.4	286.2	280.0	277.3
52.5°	274.2	272.0	265.4	260.0	256.5
55°	252.9	251.6	245.4	240.1	237.4
57.5°	233.0	231.7	225.5	220.2	217.5
60°	212.2	210.0	204.2	200.2	198.0
62.5°	191.8	190.0	183.8	180.3	178.1
65°	171.4	169.2	164.8	160.4	158.1
67.5°	150.6	148.8	144.4	140.0	139.5
70°	131.6	128.5	124.9	121.4	120.1
72.5°	111.2	108.1	105.4	102.8	101.4
75°	91.3	89.0	86.8	85.1	84.6
77.5°	71.8	70.9	68.7	68.2	66.9
80°	54.5	53.2	52.3	51.4	50.9
82.5°	37.7	37.2	37.2	36.8	36.3
85°	23.9	23.9	23.0	23.0	22.6
87.5°	11.5	11.1	10.6	10.6	10.6
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: P1033412

CATALOG NUMBER: S124DIW-B350D1050UB50-4F0-XX-W2A-F1

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)