

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: P1033404

Luminaire Tested: S124DIW-B350D1050UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033404
REPORT IS A COMBINATION OF REPORTS P997331 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB40-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

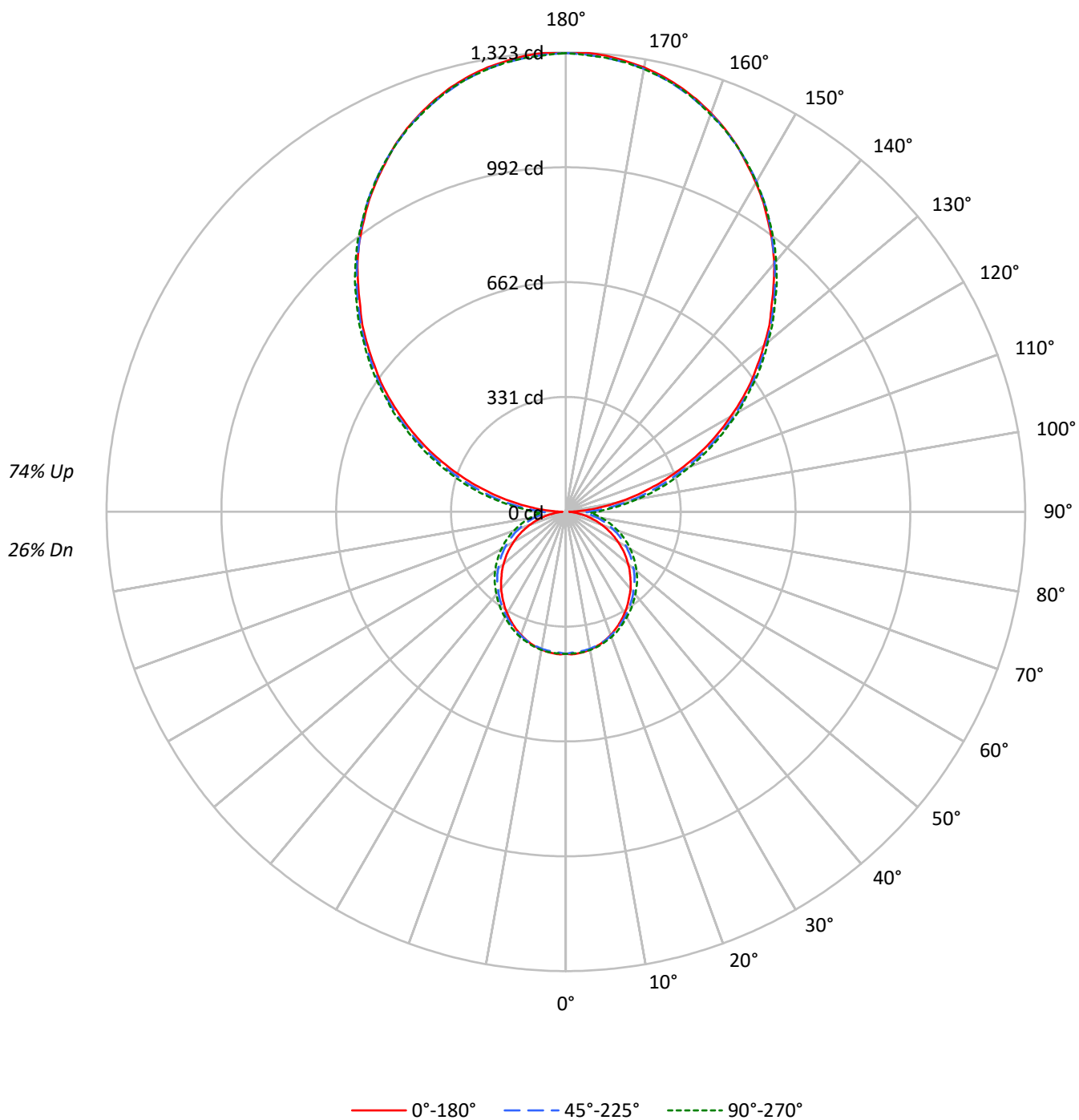
Lumens per Lamp: N/A
Luminaire Lumens: 5063.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1033404

CATALOG NUMBER: S124DIW-B350D1050UB40-4F0-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
RCR																	
0	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34
1	92	87	83	80	82	78	75	72	60	58	56	44	42	41	29	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	24	23
3	76	66	59	54	67	59	53	48	46	42	38	34	31	28	22	20	19
4	69	59	51	45	61	52	46	41	41	36	32	30	27	24	20	18	16
5	63	52	44	38	56	46	40	35	36	31	28	26	23	21	17	16	14
6	58	46	38	33	51	42	35	30	32	27	24	24	20	18	16	14	12
7	54	42	34	28	48	37	31	26	29	24	21	22	18	16	14	12	11
8	50	38	30	25	44	34	27	23	26	22	18	20	16	14	13	11	10
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	9
10	43	31	24	20	38	28	22	18	22	18	14	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3337	3337	3337
5°	3346	3249	3255
10°	3324	3186	3176
15°	3293	3114	3087
20°	3246	3036	3001
25°	3195	2950	2907
30°	3138	2865	2813
35°	3075	2778	2728
40°	3024	2695	2640
45°	2949	2616	2563
50°	2884	2527	2481
55°	2818	2441	2386
60°	2715	2335	2298
65°	2600	2220	2192
70°	2463	2088	2069
75°	2271	1942	1952
80°	2052	1793	1828
85°	1768	1643	1729

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3392 cd/sqm

TEST NUMBER: P1033404

CATALOG NUMBER: S124DIW-B350D1050UB40-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	0.8
10°-20°	111.1	2.2
20°-30°	168.0	3.3
30°-40°	203.2	4.0
40°-50°	214.8	4.2
50°-60°	202.2	4.0
60°-70°	167.7	3.3
70°-80°	117.7	2.3
80°-90°	69.2	1.4
90°-100°	125.6	2.5
100°-110°	287.1	5.7
110°-120°	457.8	9.0
120°-130°	588.9	11.6
130°-140°	653.8	12.9
140°-150°	638.8	12.6
150°-160°	536.5	10.6
160°-170°	356.9	7.1
170°-180°	125.0	2.5
0°-30°	317.8	6.3
0°-40°	521.0	10.3
0°-60°	938.0	18.5
0°-90°	1292.6	25.5
90°-120°	870.5	17.2
90°-150°	2751.9	54.4
90°-180°	3770.0	74.5
0°-180°	5063.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	409	409	409	409	409	
5°	410	408	405	409	408	39
15°	393	393	392	396	395	111
25°	359	362	363	368	369	165
35°	314	320	324	331	332	197
45°	262	271	280	287	290	203
55°	205	215	229	238	240	183
65°	142	157	172	184	187	141
75°	79	96	115	128	132	84
85°	24	44	64	78	82	25
90°	10	40	68	87	93	10
95°	67	92	118	133	137	71
105°	242	252	273	288	295	257
115°	448	452	465	474	476	442
125°	650	650	660	667	668	580
135°	838	844	847	852	852	648
145°	1017	1021	1022	1023	1022	637
155°	1165	1165	1164	1168	1164	536
165°	1268	1265	1263	1269	1265	357
175°	1319	1314	1313	1320	1313	125
180°	1321	1321	1321	1321	1321	

TEST NUMBER: P1033404

CATALOG NUMBER: S124DIW-B350D1050UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	409.2	409.2	409.2	409.2	409.2
2.5°	411.0	409.6	406.0	409.2	408.7
5°	409.6	408.2	405.0	408.7	408.2
7.5°	406.9	406.0	403.2	407.3	406.9
10°	403.2	402.7	400.5	404.6	404.1
12.5°	398.2	398.2	396.8	400.5	400.5
15°	392.7	393.1	391.8	395.9	395.4
17.5°	385.3	386.7	386.3	390.4	389.9
20°	377.5	378.9	379.4	384.0	384.0
22.5°	368.8	370.7	371.6	376.2	377.1
25°	359.2	362.0	363.3	368.4	368.8
27.5°	348.7	352.8	354.6	359.2	359.7
30°	338.1	341.8	345.0	350.1	351.0
32.5°	326.7	331.3	334.9	340.9	341.8
35°	314.3	319.8	324.4	330.8	332.2
37.5°	301.9	308.4	313.9	320.3	321.6
40°	290.0	296.0	302.4	309.3	311.1
42.5°	276.3	283.2	290.9	298.7	300.1
45°	262.1	270.8	279.5	287.3	289.6
47.5°	248.8	257.5	267.6	275.4	278.1
50°	234.1	244.2	254.3	263.5	266.2
52.5°	219.5	229.6	241.5	250.6	253.4
55°	205.3	214.9	228.6	237.8	240.5
57.5°	189.2	201.1	214.4	225.4	227.7
60°	173.7	185.6	200.7	211.2	214.9
62.5°	158.5	171.8	186.9	197.5	201.1
65°	142.0	156.7	172.3	183.7	187.4
67.5°	126.5	142.0	158.5	170.0	173.7
70°	110.4	126.0	143.4	155.8	159.0
72.5°	94.8	110.9	129.7	141.6	145.2
75°	78.8	95.8	115.0	127.8	132.0
77.5°	63.7	81.6	101.7	114.5	119.1
80°	49.9	68.3	88.4	102.2	105.8
82.5°	36.2	55.4	75.6	89.8	93.9
85°	24.3	43.5	64.1	77.9	82.5
87.5°	15.1	33.9	54.1	67.4	71.5
90°	10.4	40.0	67.9	87.2	92.9
92.5°	33.5	62.7	87.6	103.4	108.1
95°	67.3	91.6	117.5	132.9	137.1
97.5°	103.6	125.0	152.0	168.0	172.1
100°	148.0	164.1	191.1	205.6	208.8
102.5°	195.0	206.1	231.7	246.7	251.4
105°	242.1	252.4	273.3	287.9	294.7
107.5°	292.2	301.0	318.0	333.6	335.8
110°	342.9	351.3	366.3	374.9	381.5

TEST NUMBER: P1033404

CATALOG NUMBER: S124DIW-B350D1050UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	395.5	401.0	414.1	424.2	427.9
115°	448.1	452.3	464.9	474.0	476.1
117.5°	498.2	501.0	513.7	520.3	520.8
120°	547.8	553.3	563.6	567.6	573.3
122.5°	599.9	601.0	612.3	618.4	616.5
125°	650.5	650.1	660.5	667.2	667.9
127.5°	696.5	699.2	706.2	712.5	714.7
130°	745.1	747.7	755.0	761.3	759.9
132.5°	795.2	796.7	801.2	807.0	808.8
135°	837.6	843.7	846.9	852.3	851.9
137.5°	885.6	888.3	892.1	896.0	899.3
140°	933.6	935.3	935.7	940.7	941.9
142.5°	977.2	979.2	977.7	982.7	984.6
145°	1017.0	1020.6	1021.6	1023.3	1022.1
147.5°	1057.9	1062.5	1061.5	1060.9	1061.7
150°	1094.7	1098.2	1098.2	1098.2	1097.2
152.5°	1128.9	1130.9	1132.0	1135.0	1132.0
155°	1164.7	1164.7	1163.6	1167.7	1163.6
157.5°	1195.3	1193.3	1193.3	1196.3	1193.3
160°	1221.9	1220.8	1219.8	1222.9	1217.8
162.5°	1246.4	1243.3	1242.3	1248.4	1243.3
165°	1267.8	1264.8	1262.7	1268.9	1264.8
167.5°	1285.2	1281.1	1281.1	1287.2	1281.1
170°	1299.5	1294.4	1295.4	1301.5	1294.4
172.5°	1309.7	1305.6	1305.6	1312.8	1305.6
175°	1318.9	1313.8	1312.8	1319.9	1312.8
177.5°	1323.0	1317.9	1317.9	1325.0	1316.9
180°	1321.0	1321.0	1321.0	1321.0	1321.0

(END OF REPORT)