

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: P1034031

Luminaire Tested: S124RDIW-B350D1050UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034031
REPORT IS A COMBINATION OF REPORTS P1000289 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1050UB35-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

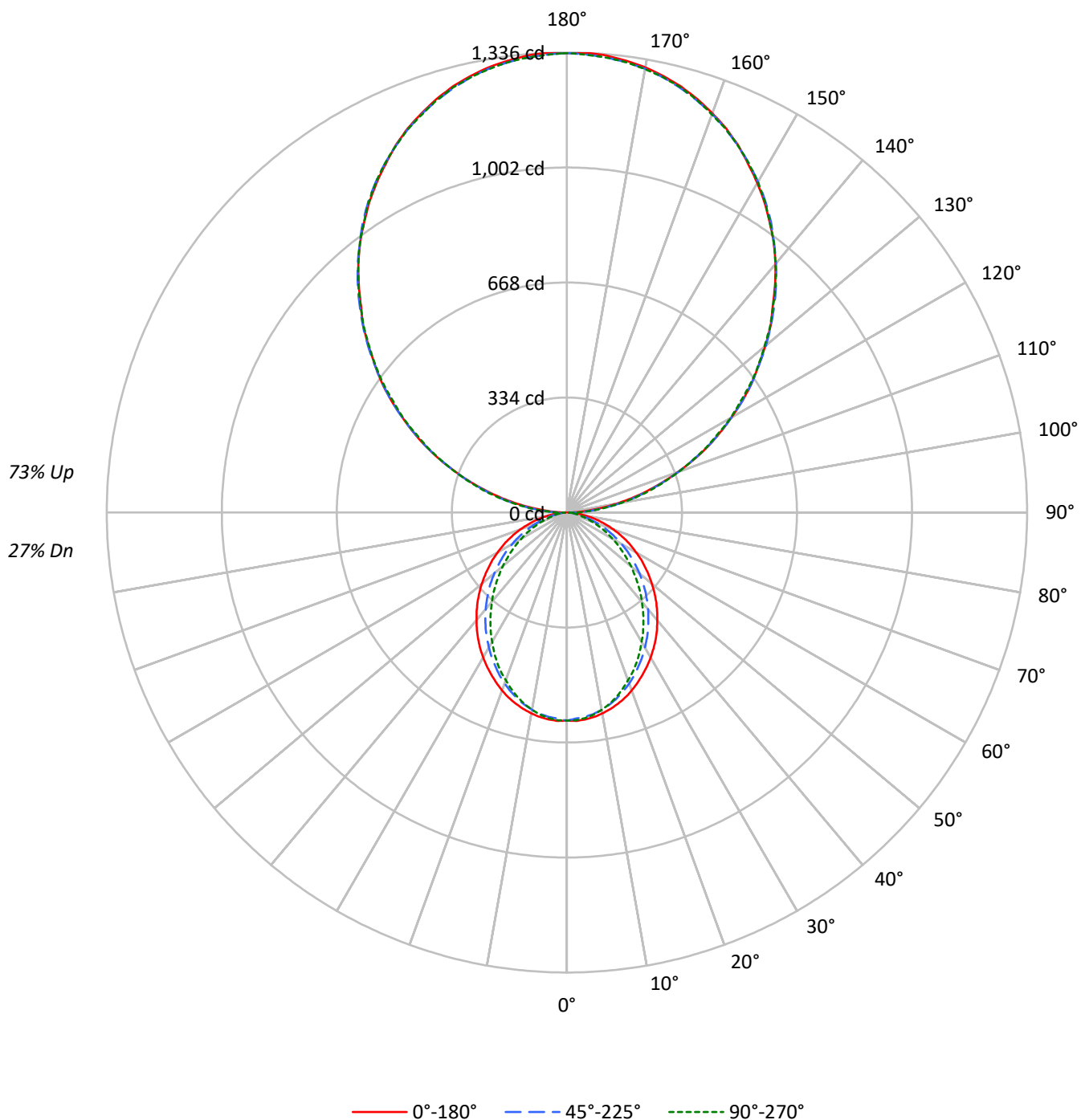
Lumens per Lamp: N/A
Luminaire Lumens: 5101.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1034031

CATALOG NUMBER: S124RDIW-B350D1050UB35-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1034031

CATALOG NUMBER: S124RDIW-B350D1050UB35-4F0-XX-W2A-F1

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4927	4927	4927
5°	4927	4780	4781
10°	4885	4630	4575
15°	4819	4441	4331
20°	4730	4228	4053
25°	4620	3996	3782
30°	4513	3761	3477
35°	4395	3522	3180
40°	4254	3265	2874
45°	4122	3010	2571
50°	3972	2731	2264
55°	3811	2446	1946
60°	3630	2142	1633
65°	3456	1794	1331
70°	3210	1429	1017
75°	2893	1039	711
80°	2418	639	511
85°	1819	366	281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4122 cd/sqm

TEST NUMBER: P1034031

CATALOG NUMBER: S124RDIW-B350D1050UB35-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	1.1
10°-20°	158.4	3.1
20°-30°	228.7	4.5
30°-40°	259.2	5.1
40°-50°	250.3	4.9
50°-60°	208.1	4.1
60°-70°	143.6	2.8
70°-80°	72.6	1.4
80°-90°	21.3	0.4
90°-100°	87.0	1.7
100°-110°	260.5	5.1
110°-120°	442.6	8.7
120°-130°	583.6	11.4
130°-140°	655.5	12.9
140°-150°	644.3	12.6
150°-160°	541.9	10.6
160°-170°	360.6	7.1
170°-180°	126.3	2.5
0°-30°	443.9	8.7
0°-40°	703.1	13.8
0°-60°	1161.4	22.8
0°-90°	1398.8	27.4
90°-120°	790.0	15.5
90°-150°	2673.5	52.4
90°-180°	3702.0	72.6
0°-180°	5101.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	604	604	604	604	604	
5°	603	601	596	600	600	57
15°	575	570	559	558	555	162
25°	520	511	492	484	480	239
35°	449	434	411	396	387	281
45°	366	349	322	299	290	283
55°	278	259	229	205	196	248
65°	189	169	139	119	114	186
75°	100	83	62	51	48	106
85°	25	16	14	13	13	27
90°	3	14	23	29	31	6
95°	62	71	78	82	82	67
105°	240	242	246	249	252	255
115°	450	450	448	447	446	444
125°	655	655	654	652	650	584
135°	845	851	851	849	846	654
145°	1027	1031	1032	1031	1028	643
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: P1034031

CATALOG NUMBER: S124RDIW-B350D1050UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	604.2	604.2	604.2	604.2	604.2
2.5°	606.0	604.2	599.1	604.2	603.7
5°	603.2	601.4	595.8	600.5	599.5
7.5°	599.1	597.2	590.3	593.5	592.1
10°	592.6	590.3	582.0	583.8	582.0
12.5°	584.3	581.5	571.3	572.3	569.5
15°	574.6	570.4	558.8	557.9	554.7
17.5°	563.5	557.4	544.0	541.7	537.1
20°	550.0	544.0	528.3	524.6	518.6
22.5°	535.2	528.3	511.2	505.2	500.5
25°	519.5	511.2	492.2	484.4	479.7
27.5°	503.3	493.1	473.3	464.0	457.5
30°	486.2	474.6	452.9	441.3	433.9
32.5°	468.2	454.7	432.1	418.2	411.3
35°	449.2	434.4	411.3	395.5	387.2
37.5°	429.3	414.0	388.6	371.5	363.1
40°	408.0	392.8	366.4	347.0	338.6
42.5°	387.7	371.5	343.7	323.8	315.0
45°	366.4	349.3	321.5	298.8	290.5
47.5°	344.6	327.1	298.4	274.8	265.5
50°	322.4	304.4	274.8	251.7	242.9
52.5°	299.8	282.2	251.7	228.1	218.8
55°	277.6	259.1	229.0	204.9	196.1
57.5°	255.8	236.4	206.8	182.3	175.8
60°	232.2	213.7	184.1	160.1	152.7
62.5°	211.0	191.5	161.0	139.2	133.7
65°	188.7	168.9	139.2	119.4	113.8
67.5°	165.6	146.6	118.9	101.3	94.8
70°	143.9	124.4	98.1	82.8	78.2
72.5°	120.7	103.6	79.1	66.6	62.5
75°	100.4	83.3	61.5	50.9	48.1
77.5°	79.1	64.3	45.8	38.4	37.5
80°	58.8	45.3	31.5	30.1	29.6
82.5°	41.2	29.1	22.7	21.7	21.3
85°	25.0	15.7	14.3	13.4	13.4
87.5°	10.6	6.9	6.5	6.0	6.5
90°	3.1	14.4	22.7	28.9	31.0
92.5°	26.8	40.2	45.4	48.5	49.5
95°	61.9	71.2	78.4	81.5	81.5
97.5°	99.1	107.3	115.6	119.7	119.7
100°	144.5	148.6	157.9	159.9	159.9
102.5°	191.9	193.0	201.2	204.3	205.4
105°	240.4	241.5	245.6	248.7	251.8
107.5°	291.0	292.0	293.1	297.2	296.2
110°	342.6	344.7	343.6	341.6	344.7

TEST NUMBER: P1034031

CATALOG NUMBER: S124RDIW-B350D1050UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	396.3	396.3	394.2	394.2	394.2
115°	449.9	449.9	447.9	446.8	445.8
117.5°	500.5	500.5	499.5	496.4	493.3
120°	551.1	555.2	552.1	546.9	549.0
122.5°	603.7	604.7	603.7	600.6	595.4
125°	655.3	655.3	654.2	652.2	650.1
127.5°	701.7	704.8	702.7	700.7	699.6
130°	751.2	754.3	754.3	752.3	748.1
132.5°	801.8	803.9	802.8	800.8	799.7
135°	845.1	851.3	851.3	849.3	846.2
137.5°	893.7	896.7	898.8	895.7	896.7
140°	942.2	944.2	944.2	943.2	942.2
142.5°	986.5	988.6	987.6	987.6	987.6
145°	1026.8	1030.9	1031.9	1030.9	1027.8
147.5°	1068.0	1073.2	1072.2	1071.1	1070.1
150°	1105.2	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)