

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: P1033394

Luminaire Tested: S124DIW-B350D1050UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033394
REPORT IS A COMBINATION OF REPORTS P997316 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB30-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

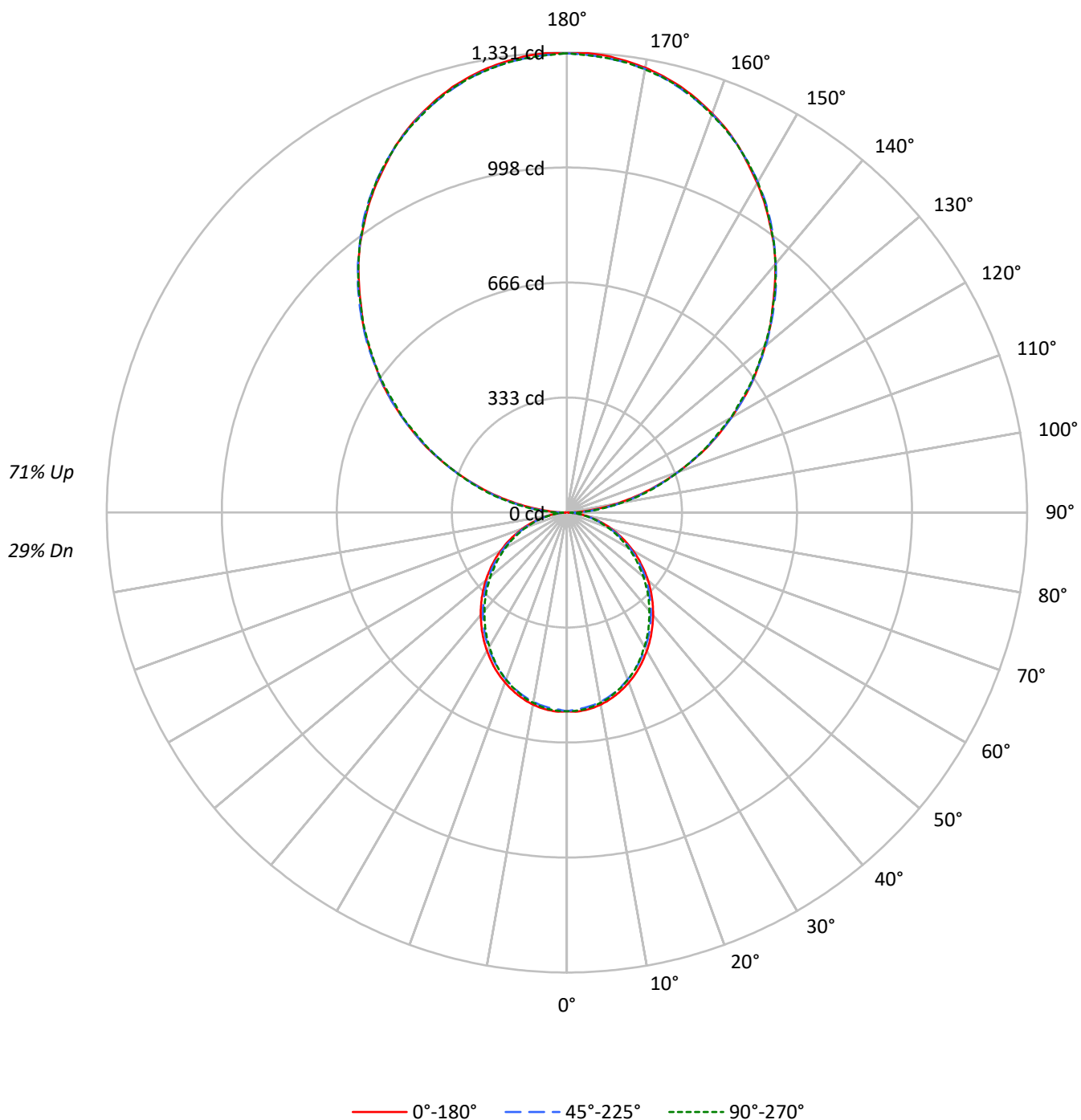
Lumens per Lamp: N/A
Luminaire Lumens: 5165.0 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1033394

CATALOG NUMBER: S124DIW-B350D1050UB30-4F0-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°	4690	4690	4690
5°	4693	4555	4560
10°	4654	4428	4397
15°	4587	4278	4213
20°	4502	4115	4023
25°	4405	3944	3818
30°	4290	3758	3593
35°	4170	3567	3375
40°	4045	3363	3144
45°	3914	3157	2928
50°	3770	2959	2689
55°	3612	2726	2451
60°	3450	2471	2203
65°	3265	2209	1924
70°	3054	1892	1625
75°	2735	1525	1301
80°	2332	1103	916
85°	1812	615	493

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3914 cd/sqm

TEST NUMBER: P1033394

CATALOG NUMBER: S124DIW-B350D1050UB30-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.0
10°-20°	152.7	3.0
20°-30°	224.7	4.4
30°-40°	261.2	5.1
40°-50°	261.2	5.1
50°-60°	228.5	4.4
60°-70°	169.6	3.3
70°-80°	96.2	1.9
80°-90°	30.4	0.6
90°-100°	86.6	1.7
100°-110°	259.4	5.0
110°-120°	440.6	8.5
120°-130°	581.1	11.3
130°-140°	652.7	12.6
140°-150°	641.5	12.4
150°-160°	539.5	10.4
160°-170°	359.0	7.0
170°-180°	125.7	2.4
0°-30°	431.6	8.4
0°-40°	692.9	13.4
0°-60°	1182.6	22.9
0°-90°	1478.8	28.6
90°-120°	786.6	15.2
90°-150°	2661.9	51.5
90°-180°	3686.0	71.4
0°-180°	5165.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	575	573	568	573	572	55
15°	547	545	538	541	540	154
25°	495	492	486	486	484	228
35°	426	423	416	413	411	267
45°	348	345	337	332	331	268
55°	263	262	255	250	247	236
65°	178	176	171	167	164	176
75°	95	93	90	88	88	101
85°	25	25	24	24	24	27
90°	3	14	23	29	31	6
95°	62	71	78	81	81	67
105°	239	240	244	248	251	254
115°	448	448	446	445	444	442
125°	652	652	651	649	647	582
135°	842	848	848	846	842	651
145°	1022	1026	1028	1026	1023	640
155°	1171	1171	1170	1174	1170	539
165°	1275	1272	1270	1276	1272	360
175°	1326	1321	1320	1328	1320	126
180°	1328	1328	1328	1328	1328	

TEST NUMBER: P1033394

CATALOG NUMBER: S124DIW-B350D1050UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	575.1	575.1	575.1	575.1	575.1
2.5°	576.9	575.5	570.5	575.1	574.6
5°	574.6	572.8	567.7	572.8	571.8
7.5°	570.5	568.6	563.1	567.2	566.8
10°	564.5	562.6	556.6	560.3	559.4
12.5°	556.6	554.8	548.3	552.5	551.1
15°	547.0	545.1	538.2	541.0	539.6
17.5°	535.9	533.6	527.1	529.0	528.1
20°	523.5	521.1	514.2	515.6	514.7
22.5°	510.1	506.9	500.0	502.7	500.9
25°	495.3	492.1	485.7	486.1	484.3
27.5°	478.8	475.5	469.5	468.6	466.3
30°	462.2	458.5	452.5	450.6	448.3
32.5°	444.7	441.4	435.0	432.7	430.4
35°	426.2	423.0	416.5	413.3	411.0
37.5°	406.9	404.1	397.2	394.0	390.7
40°	388.0	384.3	377.4	372.8	370.5
42.5°	367.7	365.9	358.0	352.5	351.1
45°	347.9	344.7	337.3	332.2	330.8
47.5°	327.2	324.9	317.9	312.4	308.7
50°	306.0	304.1	297.7	291.2	288.5
52.5°	285.2	282.9	276.0	270.5	266.8
55°	263.1	261.7	255.3	249.7	247.0
57.5°	242.4	241.0	234.5	229.0	226.2
60°	220.7	218.4	212.4	208.3	206.0
62.5°	199.5	197.7	191.2	187.5	185.2
65°	178.3	176.0	171.4	166.8	164.5
67.5°	156.7	154.8	150.2	145.6	145.1
70°	136.9	133.6	129.9	126.3	124.9
72.5°	115.7	112.4	109.7	106.9	105.5
75°	94.9	92.6	90.3	88.5	88.0
77.5°	74.6	73.7	71.4	71.0	69.6
80°	56.7	55.3	54.4	53.5	53.0
82.5°	39.2	38.7	38.7	38.2	37.8
85°	24.9	24.9	24.0	24.0	23.5
87.5°	12.0	11.5	11.1	11.1	11.1
90°	3.1	14.4	22.6	28.8	30.8
92.5°	26.7	40.1	45.2	48.3	49.3
95°	61.6	70.9	78.1	81.2	81.2
97.5°	98.6	106.9	115.1	119.2	119.2
100°	143.8	148.0	157.2	159.3	159.3
102.5°	191.1	192.1	200.4	203.4	204.5
105°	239.4	240.4	244.5	247.6	250.7
107.5°	289.7	290.8	291.8	295.9	294.9
110°	341.1	343.2	342.1	340.1	343.2

TEST NUMBER: P1033394

CATALOG NUMBER: S124DIW-B350D1050UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	394.5	394.5	392.5	392.5	392.5
115°	448.0	448.0	445.9	444.9	443.9
117.5°	498.3	498.3	497.3	494.2	491.1
120°	548.7	552.8	549.7	544.6	546.6
122.5°	601.1	602.1	601.1	598.0	592.9
125°	652.4	652.4	651.4	649.4	647.3
127.5°	698.7	701.8	699.7	697.7	696.6
130°	748.0	751.1	751.1	749.0	744.9
132.5°	798.3	800.4	799.4	797.3	796.3
135°	841.5	847.7	847.7	845.6	842.5
137.5°	889.8	892.9	894.9	891.8	892.9
140°	938.1	940.1	940.1	939.1	938.1
142.5°	982.3	984.3	983.3	983.3	983.3
145°	1022.3	1026.4	1027.5	1026.4	1023.4
147.5°	1063.4	1068.6	1067.5	1066.5	1065.5
150°	1100.4	1104.5	1104.5	1104.5	1103.5
152.5°	1135.4	1137.4	1138.4	1141.5	1138.4
155°	1171.3	1171.3	1170.3	1174.4	1170.3
157.5°	1202.1	1200.1	1200.1	1203.2	1200.1
160°	1228.9	1227.8	1226.8	1229.9	1224.7
162.5°	1253.5	1250.4	1249.4	1255.6	1250.4
165°	1275.1	1272.0	1270.0	1276.1	1272.0
167.5°	1292.6	1288.5	1288.5	1294.6	1288.5
170°	1306.9	1301.8	1302.8	1309.0	1301.8
172.5°	1317.2	1313.1	1313.1	1320.3	1313.1
175°	1326.5	1321.3	1320.3	1327.5	1320.3
177.5°	1330.6	1325.4	1325.4	1332.6	1324.4
180°	1328.5	1328.5	1328.5	1328.5	1328.5

(END OF REPORT)