

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: P1033510

Luminaire Tested: S124DIW-B350D770UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033510
REPORT IS A COMBINATION OF REPORTS P997579 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D770UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

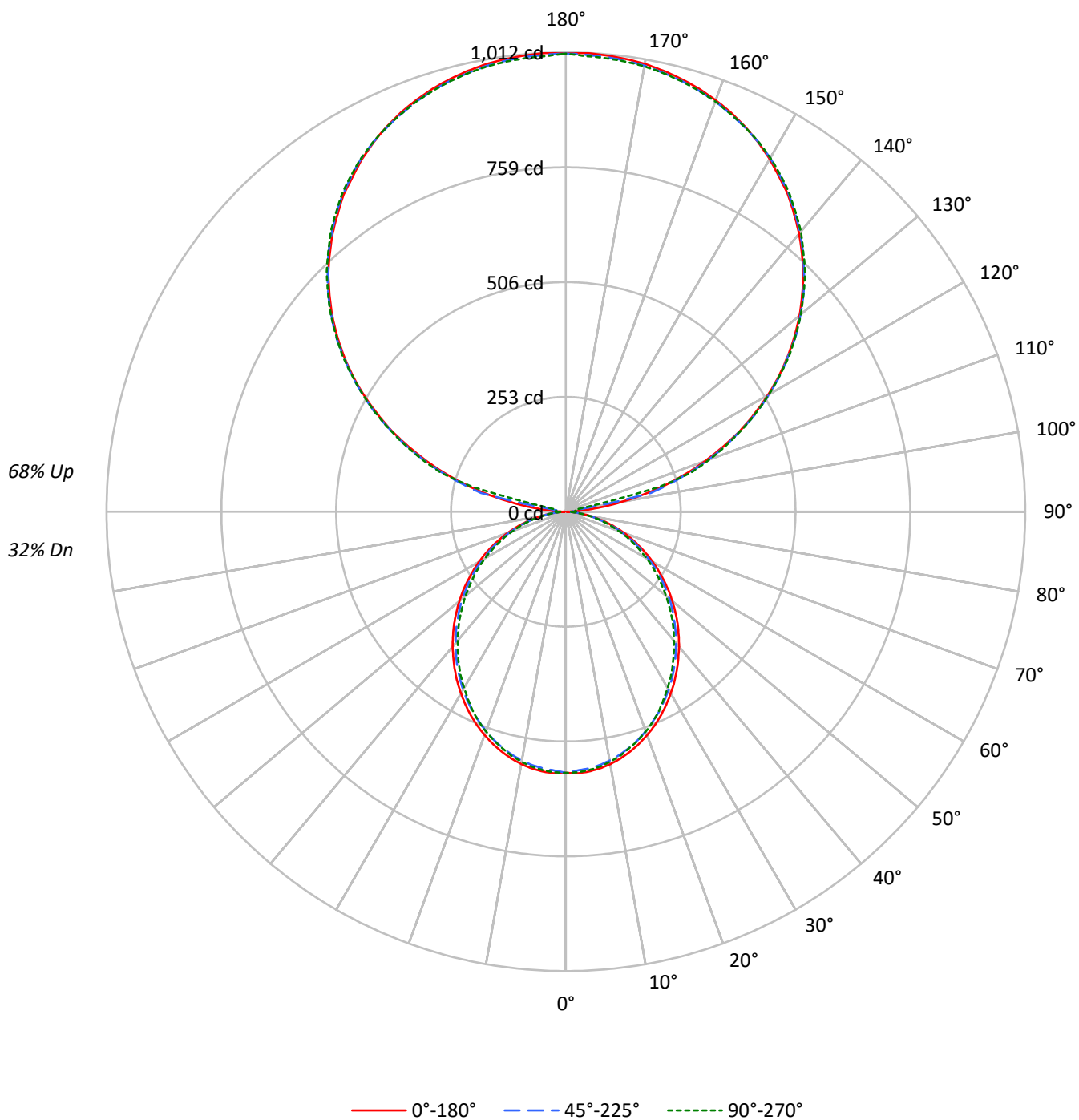
Lumens per Lamp: N/A
Luminaire Lumens: 4602.0 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 36.2
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: P1033510

CATALOG NUMBER: S124DIW-B350D770UB30-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1033510

CATALOG NUMBER: S124DIW-B350D770UB30-4F0-XX-W2A-F

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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40
1	94	90	86	82	84	81	78	75	64	62	60	49	48	46	35	34	33
2	85	78	72	67	77	71	65	61	56	53	50	43	41	39	31	29	28
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	31	28	24	22	21
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	23	19	16	17	14	12
9	48	36	29	24	43	33	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

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: P1033510

CATALOG NUMBER: S124DIW-B350D770UB30-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.2
10°-20°	152.7	3.3
20°-30°	224.7	4.9
30°-40°	261.2	5.7
40°-50°	261.2	5.7
50°-60°	228.5	5.0
60°-70°	169.6	3.7
70°-80°	96.2	2.1
80°-90°	29.7	0.6
90°-100°	33.5	0.7
100°-110°	220.7	4.8
110°-120°	421.4	9.2
120°-130°	535.0	11.6
130°-140°	572.3	12.4
140°-150°	535.2	11.6
150°-160°	431.6	9.4
160°-170°	278.3	6.0
170°-180°	95.9	2.1
0°-30°	431.6	9.4
0°-40°	692.9	15.1
0°-60°	1182.6	25.7
0°-90°	1478.1	32.1
90°-120°	675.6	14.7
90°-150°	2318.1	50.4
90°-180°	3124.0	67.9
0°-180°	4602.0	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°	2	11	17	21	23	4
95°	42	16	17	21	22	51
105°	227	232	236	242	215	238
115°	424	427	426	427	427	418
125°	596	600	598	600	601	533
135°	740	739	742	744	745	570
145°	853	856	856	856	858	533
155°	936	936	934	937	935	431
165°	987	983	983	989	982	279
175°	1010	1005	1006	1013	1004	96
180°	1010	1010	1010	1010	1010	

TEST NUMBER: P1033510

CATALOG NUMBER: S124DIW-B350D770UB30-4F0-XX-W2A-F

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°	2.3	10.6	16.6	21.1	22.7
92.5°	11.3	9.8	15.9	20.4	20.4
95°	41.5	15.9	16.6	21.1	21.9
97.5°	79.3	95.9	16.6	20.4	21.1
100°	123.8	137.4	33.2	20.4	21.1
102.5°	173.7	182.7	191.8	21.9	21.9
105°	227.3	231.8	235.6	242.4	215.2
107.5°	276.4	278.6	283.9	287.7	290.7
110°	326.2	328.5	333.0	334.5	336.8

TEST NUMBER: P1033510

CATALOG NUMBER: S124DIW-B350D770UB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	374.5	379.1	380.6	379.8	382.8
115°	424.4	426.6	425.9	427.4	427.4
117.5°	468.9	471.9	474.2	473.4	473.4
120°	514.2	517.2	516.5	518.0	516.5
122.5°	556.5	558.0	559.5	560.3	558.8
125°	596.5	599.5	598.0	600.3	601.1
127.5°	635.0	635.8	639.6	638.8	638.1
130°	672.0	672.8	675.0	675.8	675.8
132.5°	706.0	707.5	710.5	711.3	710.5
135°	740.0	739.2	742.3	743.8	745.3
137.5°	770.2	770.2	774.0	775.5	774.7
140°	799.6	801.1	802.7	804.9	805.7
142.5°	826.1	829.1	829.8	831.4	831.4
145°	853.3	855.5	855.5	856.3	857.8
147.5°	874.4	878.9	878.2	878.9	879.7
150°	897.8	900.8	900.1	900.1	900.8
152.5°	917.4	919.7	918.2	919.7	918.9
155°	935.6	936.3	934.0	937.1	934.8
157.5°	951.4	951.4	948.4	952.2	948.4
160°	965.0	962.7	962.0	966.5	962.0
162.5°	977.1	974.1	973.3	977.8	972.6
165°	986.9	983.1	983.1	989.2	982.4
167.5°	995.2	991.4	990.7	997.5	989.9
170°	1002.0	997.5	998.2	1004.3	996.7
172.5°	1006.5	1002.0	1002.8	1008.8	1000.5
175°	1009.6	1005.0	1005.8	1012.6	1003.5
177.5°	1011.8	1006.5	1008.0	1014.1	1005.0
180°	1009.6	1009.6	1009.6	1009.6	1009.6

(END OF REPORT)