

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: P1001310

Luminaire Tested: SA4XXDIP-B350D590UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001310
REPORT IS A COMBINATION OF REPORTS P995929 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D590UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

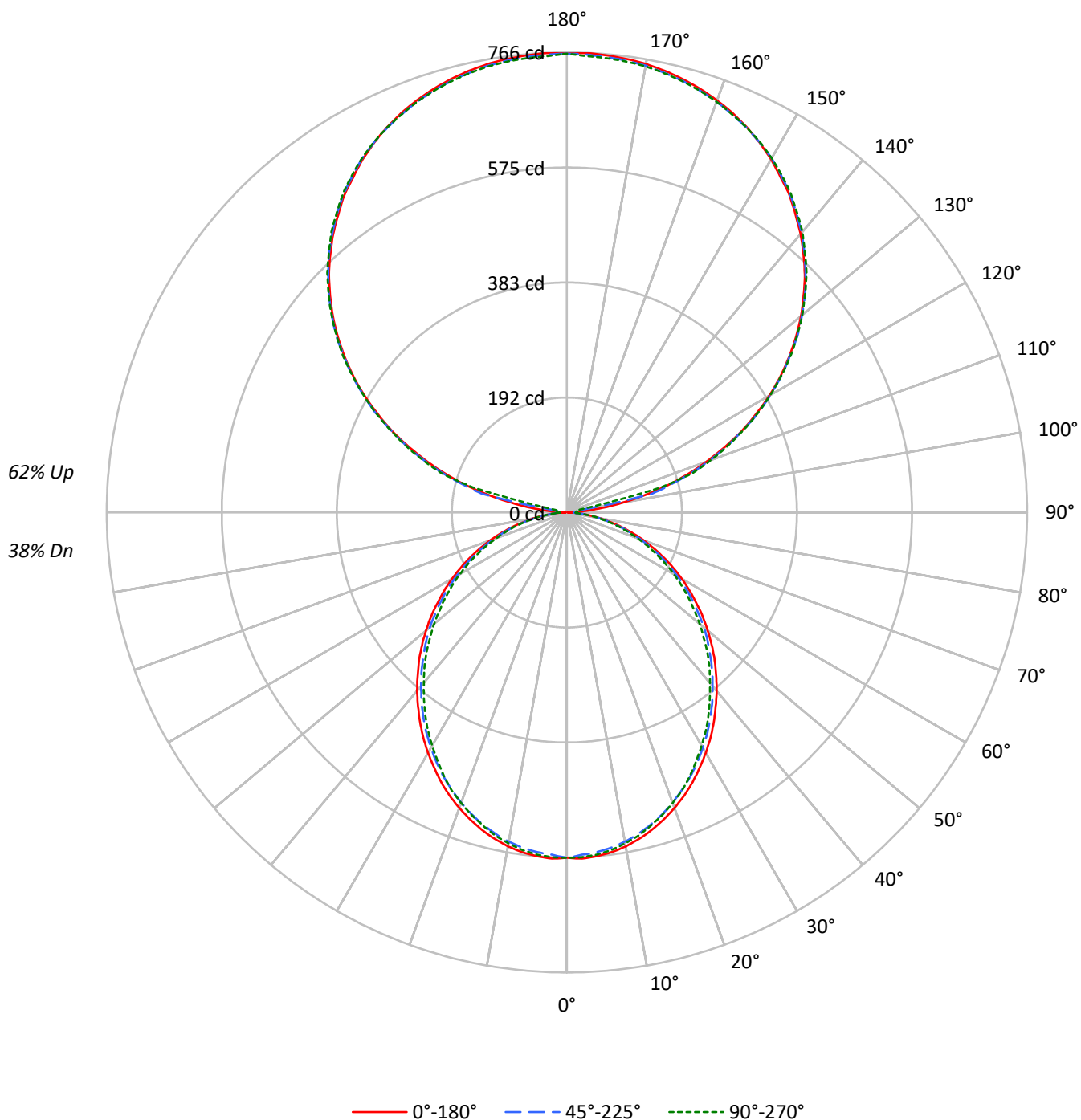
Lumens per Lamp: N/A
Luminaire Lumens: 3842.0 lumens
Efficiency: N/A
Efficacy: 135.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 28.4
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: P1001310

CATALOG NUMBER: SA4XXDIP-B350D590UB30-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1001310

CATALOG NUMBER: SA4XXDIP-B350D590UB30-4F0-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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32
3	79	70	63	57	71	64	57	52	52	47	44	41	38	35	31	29	27
4	72	62	54	48	65	56	50	44	46	41	37	37	33	30	28	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	16	14
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	16	14	12

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: P1001310

CATALOG NUMBER: SA4XXDIP-B350D590UB30-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.4
10°-20°	152.7	4.0
20°-30°	224.7	5.8
30°-40°	261.2	6.8
40°-50°	261.2	6.8
50°-60°	228.5	5.9
60°-70°	169.6	4.4
70°-80°	96.2	2.5
80°-90°	29.2	0.8
90°-100°	25.4	0.7
100°-110°	167.0	4.3
110°-120°	319.0	8.3
120°-130°	404.9	10.5
130°-140°	433.2	11.3
140°-150°	405.0	10.5
150°-160°	326.6	8.5
160°-170°	210.7	5.5
170°-180°	72.6	1.9
0°-30°	431.6	11.2
0°-40°	692.9	18.0
0°-60°	1182.6	30.8
0°-90°	1477.6	38.5
90°-120°	511.4	13.3
90°-150°	1754.5	45.7
90°-180°	2364.0	61.5
0°-180°	3842.0	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	8	13	16	17	3
95°	31	12	13	16	17	39
105°	172	176	178	184	163	180
115°	321	323	322	324	324	316
125°	452	454	453	454	455	403
135°	560	560	562	563	564	432
145°	646	648	648	648	649	404
155°	708	709	707	709	708	327
165°	747	744	744	749	744	211
175°	764	761	761	766	760	73
180°	764	764	764	764	764	

TEST NUMBER: P1001310

CATALOG NUMBER: SA4XXDIP-B350D590UB30-4F0-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°	1.7	8.0	12.6	16.0	17.1
92.5°	8.6	7.4	12.0	15.4	15.4
95°	31.4	12.0	12.6	16.0	16.6
97.5°	60.0	72.6	12.6	15.4	16.0
100°	93.7	104.0	25.1	15.4	16.0
102.5°	131.4	138.3	145.2	16.6	16.6
105°	172.0	175.5	178.3	183.5	162.9
107.5°	209.2	210.9	214.9	217.7	220.0
110°	246.9	248.6	252.0	253.2	254.9

TEST NUMBER: P1001310

CATALOG NUMBER: SA4XXDIP-B350D590UB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.5	286.9	288.0	287.5	289.8
115°	321.2	322.9	322.3	323.5	323.5
117.5°	354.9	357.2	358.9	358.3	358.3
120°	389.2	391.5	390.9	392.1	390.9
122.5°	421.2	422.3	423.5	424.1	422.9
125°	451.5	453.8	452.6	454.4	454.9
127.5°	480.6	481.2	484.1	483.5	482.9
130°	508.6	509.2	510.9	511.5	511.5
132.5°	534.4	535.5	537.8	538.4	537.8
135°	560.1	559.5	561.8	562.9	564.1
137.5°	582.9	582.9	585.8	586.9	586.4
140°	605.2	606.4	607.5	609.2	609.8
142.5°	625.2	627.5	628.1	629.2	629.2
145°	645.8	647.5	647.5	648.1	649.2
147.5°	661.8	665.2	664.7	665.2	665.8
150°	679.5	681.8	681.2	681.2	681.8
152.5°	694.4	696.1	695.0	696.1	695.5
155°	708.1	708.7	707.0	709.2	707.5
157.5°	720.1	720.1	717.8	720.7	717.8
160°	730.4	728.7	728.1	731.5	728.1
162.5°	739.5	737.2	736.7	740.1	736.1
165°	747.0	744.1	744.1	748.7	743.5
167.5°	753.3	750.4	749.8	755.0	749.2
170°	758.4	755.0	755.5	760.1	754.4
172.5°	761.8	758.4	759.0	763.5	757.3
175°	764.1	760.7	761.3	766.4	759.5
177.5°	765.8	761.8	763.0	767.5	760.7
180°	764.1	764.1	764.1	764.1	764.1

(END OF REPORT)