

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: P1001311

Luminaire Tested: SA4XXDIP-B350D590UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001311
REPORT IS A COMBINATION OF REPORTS P995930 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-F1
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

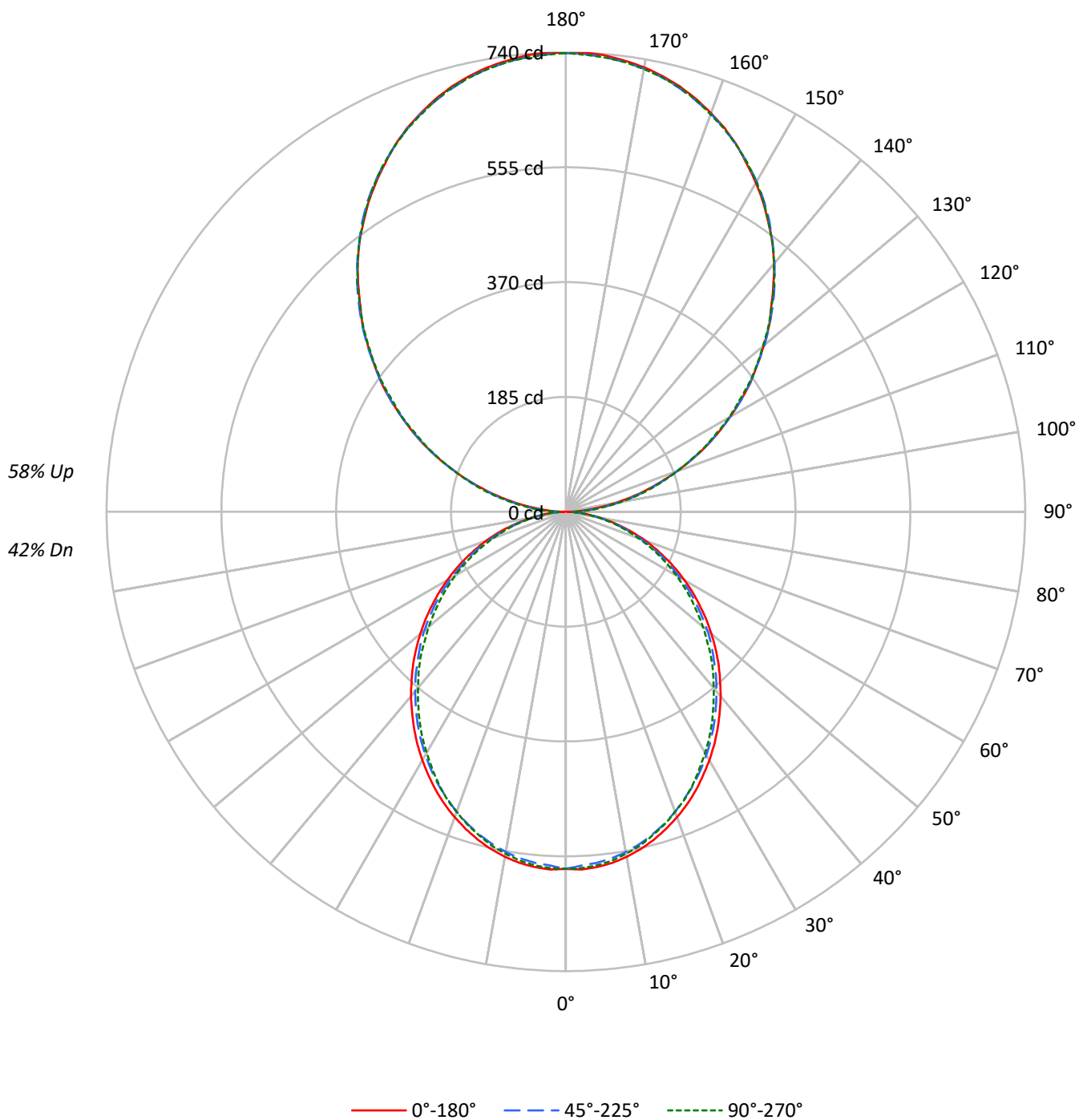
Lumens per Lamp: N/A
Luminaire Lumens: 3528.0 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49
1	96	92	88	84	87	84	80	78	69	67	65	55	54	52	43	42	41
2	87	80	74	69	79	73	68	64	60	57	53	49	46	44	38	36	35
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	33	31	29
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25
5	67	55	47	41	61	51	44	39	42	37	33	34	30	27	27	24	22
6	61	50	42	36	56	46	39	33	38	33	29	31	27	24	24	22	19
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.5
10°-20°	152.7	4.3
20°-30°	224.7	6.4
30°-40°	261.2	7.4
40°-50°	261.2	7.4
50°-60°	228.5	6.5
60°-70°	169.6	4.8
70°-80°	96.2	2.7
80°-90°	29.2	0.8
90°-100°	48.2	1.4
100°-110°	144.3	4.1
110°-120°	245.1	6.9
120°-130°	323.2	9.2
130°-140°	363.1	10.3
140°-150°	356.8	10.1
150°-160°	300.1	8.5
160°-170°	199.7	5.7
170°-180°	69.9	2.0
0°-30°	431.6	12.2
0°-40°	692.9	19.6
0°-60°	1182.6	33.5
0°-90°	1477.6	41.9
90°-120°	437.5	12.4
90°-150°	1480.7	42.0
90°-180°	2050.0	58.1
0°-180°	3528.0	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	4
95°	34	39	43	45	45	37
105°	133	134	136	138	140	141
115°	249	249	248	248	247	246
125°	363	363	362	361	360	323
135°	468	472	472	470	469	362
145°	569	571	572	571	569	356
155°	652	652	651	653	651	300
165°	709	708	706	710	708	200
175°	738	735	734	738	734	70
180°	739	739	739	739	739	

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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°	14.9	22.3	25.1	26.9	27.4
95°	34.3	39.4	43.4	45.2	45.2
97.5°	54.9	59.4	64.0	66.3	66.3
100°	80.0	82.3	87.4	88.6	88.6
102.5°	106.3	106.9	111.4	113.2	113.7
105°	133.2	133.7	136.0	137.7	139.5
107.5°	161.2	161.7	162.3	164.6	164.0
110°	189.7	190.9	190.3	189.2	190.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	219.5	219.5	218.3	218.3	218.3
115°	249.2	249.2	248.0	247.5	246.9
117.5°	277.2	277.2	276.6	274.9	273.2
120°	305.2	307.5	305.8	302.9	304.1
122.5°	334.3	334.9	334.3	332.6	329.8
125°	362.9	362.9	362.3	361.2	360.1
127.5°	388.6	390.4	389.2	388.1	387.5
130°	416.1	417.8	417.8	416.6	414.4
132.5°	444.1	445.2	444.7	443.5	442.9
135°	468.1	471.5	471.5	470.4	468.7
137.5°	494.9	496.7	497.8	496.1	496.7
140°	521.8	522.9	522.9	522.4	521.8
142.5°	546.4	547.5	547.0	547.0	547.0
145°	568.7	571.0	571.5	571.0	569.2
147.5°	591.5	594.4	593.8	593.2	592.7
150°	612.1	614.4	614.4	614.4	613.8
152.5°	631.5	632.7	633.3	635.0	633.3
155°	651.5	651.5	651.0	653.3	651.0
157.5°	668.7	667.5	667.5	669.3	667.5
160°	683.5	683.0	682.4	684.1	681.3
162.5°	697.3	695.6	695.0	698.4	695.6
165°	709.3	707.6	706.4	709.8	707.6
167.5°	719.0	716.7	716.7	720.1	716.7
170°	727.0	724.1	724.7	728.1	724.1
172.5°	732.7	730.4	730.4	734.4	730.4
175°	737.8	735.0	734.4	738.4	734.4
177.5°	740.1	737.3	737.3	741.3	736.7
180°	739.0	739.0	739.0	739.0	739.0

(END OF REPORT)