

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: P1001321

Luminaire Tested: SA4XXDIP-B350D590UB35-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001321
REPORT IS A COMBINATION OF REPORTS P995940 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D590UB35-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

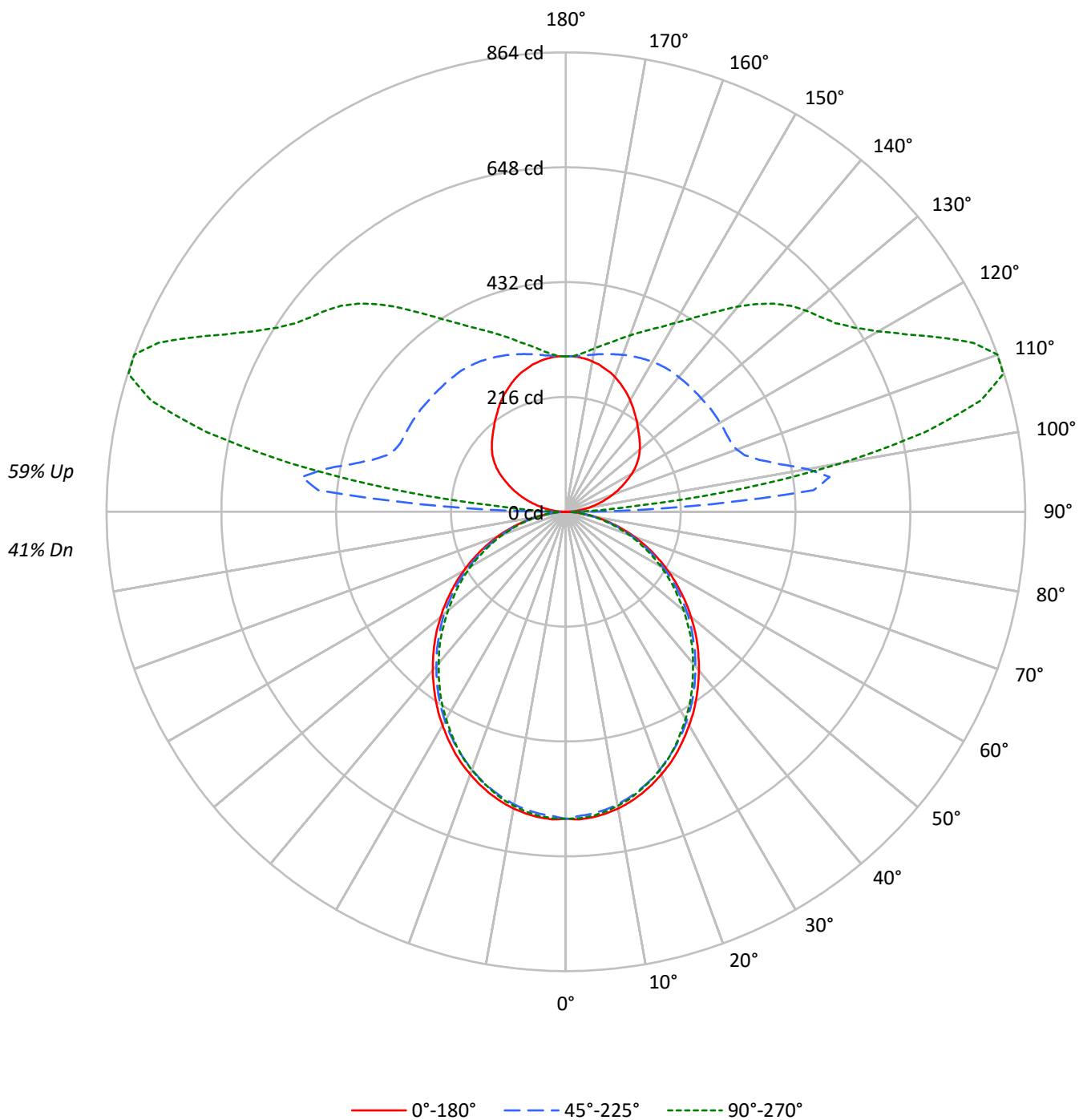
Lumens per Lamp: N/A
Luminaire Lumens: 3615.3 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	78	78	78	62	62	62	48	48	48
1	96	91	88	84	87	83	80	77	69	66	64	55	53	52	42	41	40
2	87	80	74	69	79	73	68	63	60	56	53	48	46	43	37	35	34
3	79	70	63	57	72	64	58	53	53	48	45	43	39	37	33	31	29
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	26	24	22
6	61	49	41	36	56	45	38	33	38	32	28	31	27	24	24	21	19
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17
8	53	40	33	28	48	37	30	26	31	26	22	25	22	19	20	17	15
9	49	37	29	24	45	34	27	23	29	23	20	23	20	17	19	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4708	4708	4708
5°	4712	4573	4579
10°	4673	4446	4415
15°	4606	4295	4230
20°	4520	4132	4039
25°	4424	3959	3834
30°	4307	3772	3608
35°	4187	3581	3389
40°	4062	3376	3157
45°	3930	3171	2940
50°	3784	2971	2699
55°	3627	2737	2461
60°	3464	2482	2212
65°	3278	2218	1932
70°	3065	1900	1631
75°	2746	1532	1307
80°	2340	1107	919
85°	1819	618	495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3930 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.5
10°-20°	153.3	4.2
20°-30°	225.7	6.2
30°-40°	262.3	7.3
40°-50°	262.3	7.3
50°-60°	229.4	6.3
60°-70°	170.3	4.7
70°-80°	96.6	2.7
80°-90°	28.8	0.8
90°-100°	217.0	6.0
100°-110°	441.4	12.2
110°-120°	393.4	10.9
120°-130°	330.5	9.1
130°-140°	275.8	7.6
140°-150°	210.6	5.8
150°-160°	148.0	4.1
160°-170°	87.1	2.4
170°-180°	28.3	0.8
0°-30°	433.4	12.0
0°-40°	695.7	19.2
0°-60°	1187.4	32.8
0°-90°	1483.1	41.0
90°-120°	1051.9	29.1
90°-150°	1868.7	51.7
90°-180°	2132.0	59.0
0°-180°	3615.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	577	575	570	575	574	55
15°	549	547	540	543	542	155
25°	497	494	488	488	486	229
35°	428	425	418	415	413	268
45°	349	346	339	334	332	269
55°	264	263	256	251	248	237
65°	179	177	172	168	165	177
75°	95	93	91	89	88	101
85°	25	25	24	24	24	27
90°	1	5	10	12	12	3
95°	19	60	468	232	140	21
105°	67	97	376	811	808	72
115°	118	148	336	645	775	117
125°	165	196	334	549	619	147
135°	196	233	331	487	553	151
145°	226	258	330	411	452	142
155°	257	277	320	363	378	118
165°	280	288	307	325	330	79
175°	292	292	294	298	297	28
180°	292	292	292	292	292	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.4	577.4	577.4	577.4	577.4
2.5°	579.2	577.9	572.8	577.4	576.9
5°	576.9	575.1	570.0	575.1	574.2
7.5°	572.8	570.9	565.4	569.5	569.1
10°	566.8	564.9	558.9	562.6	561.7
12.5°	558.9	557.0	550.6	554.7	553.3
15°	549.2	547.3	540.4	543.2	541.8
17.5°	538.1	535.8	529.3	531.1	530.2
20°	525.6	523.3	516.3	517.7	516.8
22.5°	512.2	508.9	502.0	504.8	502.9
25°	497.4	494.1	487.6	488.1	486.3
27.5°	480.7	477.5	471.4	470.5	468.2
30°	464.0	460.3	454.3	452.5	450.2
32.5°	446.5	443.2	436.7	434.4	432.1
35°	428.0	424.7	418.2	415.0	412.7
37.5°	408.5	405.8	398.8	395.6	392.3
40°	389.6	385.9	378.9	374.3	372.0
42.5°	369.2	367.3	359.5	353.9	352.5
45°	349.3	346.1	338.7	333.6	332.2
47.5°	328.5	326.2	319.2	313.7	310.0
50°	307.2	305.4	298.9	292.4	289.6
52.5°	286.4	284.1	277.1	271.6	267.9
55°	264.2	262.8	256.3	250.8	248.0
57.5°	243.4	242.0	235.5	229.9	227.2
60°	221.6	219.3	213.3	209.1	206.8
62.5°	200.3	198.5	192.0	188.3	186.0
65°	179.0	176.7	172.1	167.5	165.2
67.5°	157.3	155.5	150.8	146.2	145.7
70°	137.4	134.2	130.5	126.8	125.4
72.5°	116.1	112.9	110.1	107.3	105.9
75°	95.3	93.0	90.7	88.8	88.4
77.5°	75.0	74.0	71.7	71.2	69.9
80°	56.9	55.5	54.6	53.7	53.2
82.5°	39.3	38.9	38.9	38.4	37.9
85°	25.0	25.0	24.1	24.1	23.6
87.5°	12.0	11.6	11.1	11.1	11.1
90°	0.6	4.6	10.3	11.5	12.1
92.5°	8.0	44.2	225.0	74.4	52.2
95°	18.9	59.6	467.8	231.6	140.1
97.5°	31.6	66.0	500.5	473.0	336.4
100°	43.6	74.6	461.5	654.4	526.3
102.5°	55.1	84.9	412.7	768.0	691.6
105°	67.2	97.3	376.5	810.8	807.6
107.5°	80.4	109.9	353.0	797.8	862.7
110°	93.6	122.6	342.1	751.9	863.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.2	135.2	336.9	695.7	830.0
115°	118.2	148.4	335.8	645.2	775.4
117.5°	130.9	160.8	335.2	605.6	722.1
120°	143.5	172.8	335.2	578.8	678.4
122.5°	155.0	184.6	334.6	561.4	644.0
125°	164.7	195.8	334.1	549.0	618.8
127.5°	173.9	206.0	332.9	537.2	602.7
130°	181.4	216.1	332.3	523.2	588.9
132.5°	188.8	224.8	331.8	506.5	573.4
135°	195.7	233.0	331.2	487.4	553.3
137.5°	202.6	240.2	331.2	466.6	529.8
140°	210.1	246.8	330.6	446.6	504.0
142.5°	218.1	252.8	330.6	427.9	476.4
145°	225.6	258.3	329.5	411.0	451.7
147.5°	234.2	263.4	327.7	396.9	428.8
150°	242.2	268.4	326.0	384.0	409.8
152.5°	249.7	272.9	323.2	373.1	392.6
155°	256.6	277.0	320.3	362.8	378.3
157.5°	263.5	280.6	317.4	353.0	365.1
160°	269.8	283.8	314.0	343.2	353.0
162.5°	275.5	286.4	310.5	333.8	341.5
165°	279.5	288.2	307.1	325.2	330.0
167.5°	284.1	289.6	303.6	317.7	320.9
170°	287.0	290.8	300.2	310.2	312.2
172.5°	289.9	291.6	296.7	303.6	303.6
175°	291.6	292.2	294.5	298.5	297.3
177.5°	292.7	292.2	292.7	294.8	292.7
180°	292.2	292.2	292.2	292.2	292.2

(END OF REPORT)