

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: P1001398

Luminaire Tested: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001398
REPORT IS A COMBINATION OF REPORTS P996017 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

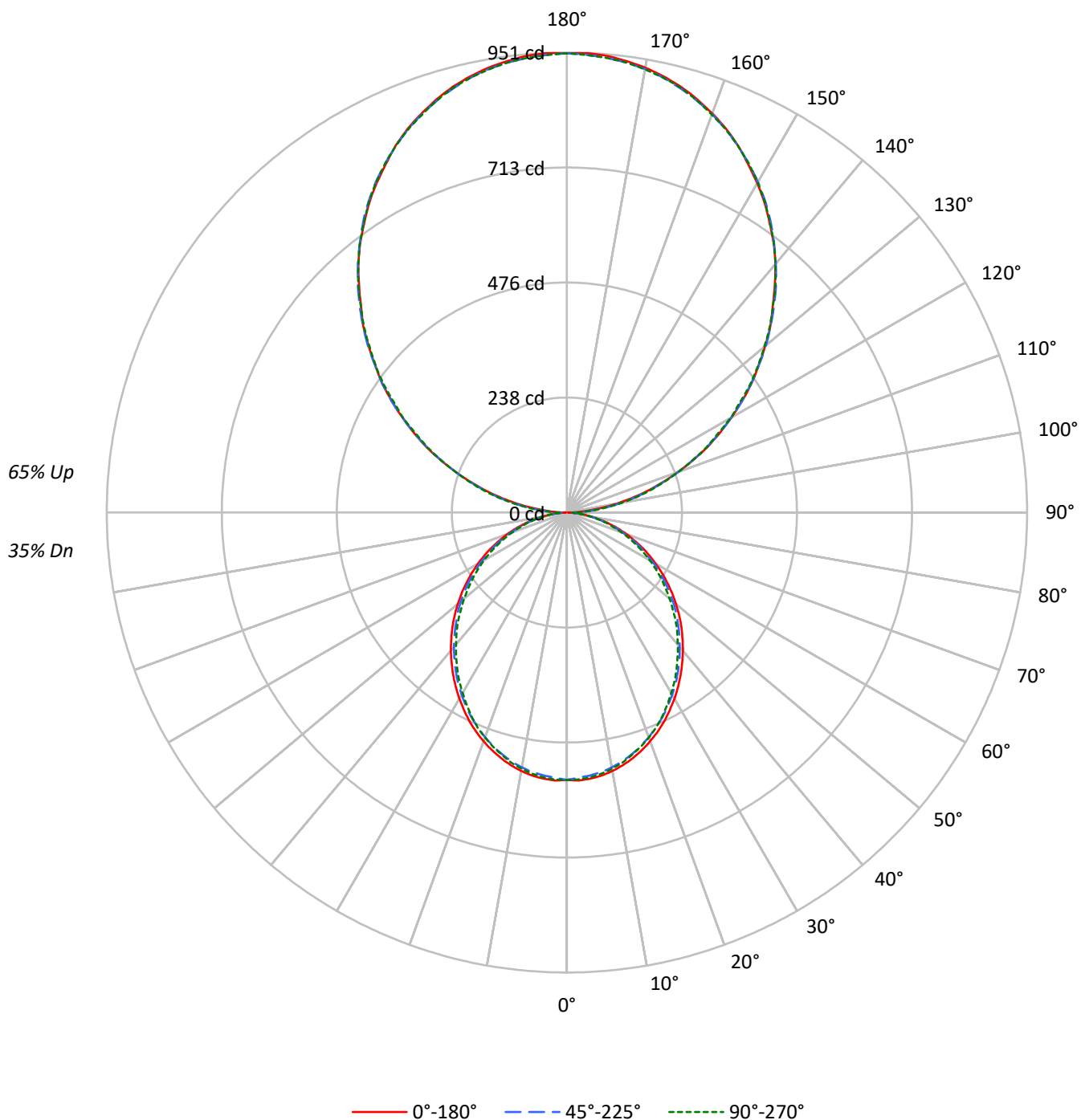
Lumens per Lamp: N/A
Luminaire Lumens: 4055.0 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
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: P1001398

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1001398

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F1

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	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	90	86	83	85	82	78	75	66	63	61	51	49	48	37	37	36
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30
3	78	69	62	56	71	63	57	52	51	46	43	39	36	34	29	27	26
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	43	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	28	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4509	4509	4509
5°	4512	4379	4384
10°	4474	4257	4227
15°	4409	4112	4050
20°	4327	3956	3867
25°	4235	3791	3671
30°	4124	3612	3454
35°	4009	3430	3245
40°	3889	3233	3023
45°	3763	3036	2815
50°	3623	2844	2585
55°	3472	2621	2356
60°	3317	2376	2118
65°	3139	2124	1849
70°	2936	1819	1563
75°	2631	1466	1251
80°	2242	1061	879
85°	1739	589	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3763 cd/sqm

TEST NUMBER: P1001398

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.3
10°-20°	146.8	3.6
20°-30°	216.1	5.3
30°-40°	251.2	6.2
40°-50°	251.1	6.2
50°-60°	219.6	5.4
60°-70°	163.1	4.0
70°-80°	92.5	2.3
80°-90°	28.5	0.7
90°-100°	61.9	1.5
100°-110°	185.3	4.6
110°-120°	314.8	7.8
120°-130°	415.2	10.2
130°-140°	466.4	11.5
140°-150°	458.4	11.3
150°-160°	385.5	9.5
160°-170°	256.5	6.3
170°-180°	89.8	2.2
0°-30°	415.0	10.2
0°-40°	666.1	16.4
0°-60°	1136.9	28.0
0°-90°	1421.0	35.0
90°-120°	562.1	13.9
90°-150°	1902.1	46.9
90°-180°	2634.0	65.0
0°-180°	4055.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	552	551	546	551	550	52
15°	526	524	517	520	519	148
25°	476	473	467	467	466	219
35°	410	407	400	397	395	256
45°	334	331	324	319	318	258
55°	253	252	245	240	237	227
65°	171	169	165	160	158	170
75°	91	89	87	85	85	97
85°	24	24	23	23	23	26
90°	2	10	16	21	22	5
95°	44	51	56	58	58	48
105°	171	172	175	177	179	181
115°	320	320	319	318	317	316
125°	466	466	466	464	462	416
135°	601	606	606	604	602	465
145°	730	734	734	734	731	457
155°	837	837	836	839	836	385
165°	911	909	908	912	909	257
175°	948	944	943	949	943	90
180°	949	949	949	949	949	

TEST NUMBER: P1001398

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.9	552.9	552.9	552.9	552.9
2.5°	554.6	553.3	548.4	552.9	552.4
5°	552.4	550.6	545.8	550.6	549.8
7.5°	548.4	546.6	541.3	545.3	544.9
10°	542.7	540.9	535.1	538.7	537.8
12.5°	535.1	533.4	527.2	531.1	529.8
15°	525.8	524.1	517.4	520.1	518.7
17.5°	515.2	513.0	506.8	508.6	507.7
20°	503.2	501.0	494.4	495.7	494.8
22.5°	490.4	487.3	480.6	483.3	481.5
25°	476.2	473.1	466.9	467.4	465.6
27.5°	460.3	457.2	451.4	450.5	448.3
30°	444.3	440.8	435.0	433.2	431.0
32.5°	427.5	424.4	418.2	416.0	413.8
35°	409.8	406.7	400.5	397.4	395.1
37.5°	391.2	388.5	381.9	378.8	375.7
40°	373.0	369.5	362.8	358.4	356.2
42.5°	353.5	351.7	344.2	338.9	337.6
45°	334.5	331.4	324.3	319.4	318.1
47.5°	314.5	312.3	305.7	300.3	296.8
50°	294.1	292.4	286.2	280.0	277.3
52.5°	274.2	272.0	265.4	260.0	256.5
55°	252.9	251.6	245.4	240.1	237.4
57.5°	233.0	231.7	225.5	220.2	217.5
60°	212.2	210.0	204.2	200.2	198.0
62.5°	191.8	190.0	183.8	180.3	178.1
65°	171.4	169.2	164.8	160.4	158.1
67.5°	150.6	148.8	144.4	140.0	139.5
70°	131.6	128.5	124.9	121.4	120.1
72.5°	111.2	108.1	105.4	102.8	101.4
75°	91.3	89.0	86.8	85.1	84.6
77.5°	71.8	70.9	68.7	68.2	66.9
80°	54.5	53.2	52.3	51.4	50.9
82.5°	37.7	37.2	37.2	36.8	36.3
85°	23.9	23.9	23.0	23.0	22.6
87.5°	11.5	11.1	10.6	10.6	10.6
90°	2.2	10.3	16.2	20.6	22.0
92.5°	19.1	28.6	32.3	34.5	35.2
95°	44.1	50.7	55.8	58.0	58.0
97.5°	70.5	76.4	82.2	85.2	85.2
100°	102.8	105.7	112.3	113.8	113.8
102.5°	136.6	137.3	143.2	145.4	146.1
105°	171.1	171.8	174.7	176.9	179.1
107.5°	207.0	207.8	208.5	211.4	210.7
110°	243.8	245.2	244.5	243.0	245.2

TEST NUMBER: P1001398

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.9	281.9	280.5	280.5	280.5
115°	320.1	320.1	318.6	317.9	317.2
117.5°	356.1	356.1	355.3	353.1	350.9
120°	392.1	395.0	392.8	389.1	390.6
122.5°	429.5	430.2	429.5	427.3	423.6
125°	466.2	466.2	465.5	464.0	462.5
127.5°	499.2	501.5	500.0	498.5	497.8
130°	534.5	536.7	536.7	535.2	532.3
132.5°	570.5	571.9	571.2	569.7	569.0
135°	601.3	605.7	605.7	604.2	602.0
137.5°	635.8	638.0	639.5	637.3	638.0
140°	670.3	671.8	671.8	671.0	670.3
142.5°	701.9	703.4	702.6	702.6	702.6
145°	730.5	733.5	734.2	733.5	731.3
147.5°	759.9	763.6	762.8	762.1	761.4
150°	786.3	789.3	789.3	789.3	788.5
152.5°	811.3	812.7	813.5	815.7	813.5
155°	837.0	837.0	836.2	839.2	836.2
157.5°	859.0	857.5	857.5	859.7	857.5
160°	878.1	877.4	876.6	878.8	875.2
162.5°	895.7	893.5	892.8	897.2	893.5
165°	911.1	908.9	907.5	911.9	908.9
167.5°	923.6	920.7	920.7	925.1	920.7
170°	933.9	930.2	930.9	935.4	930.2
172.5°	941.2	938.3	938.3	943.4	938.3
175°	947.8	944.2	943.4	948.6	943.4
177.5°	950.8	947.1	947.1	952.2	946.4
180°	949.3	949.3	949.3	949.3	949.3

(END OF REPORT)