

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: P1001389

Luminaire Tested: SA4XXDIP-B350D810UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001389
REPORT IS A COMBINATION OF REPORTS P996008 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D810UB40-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

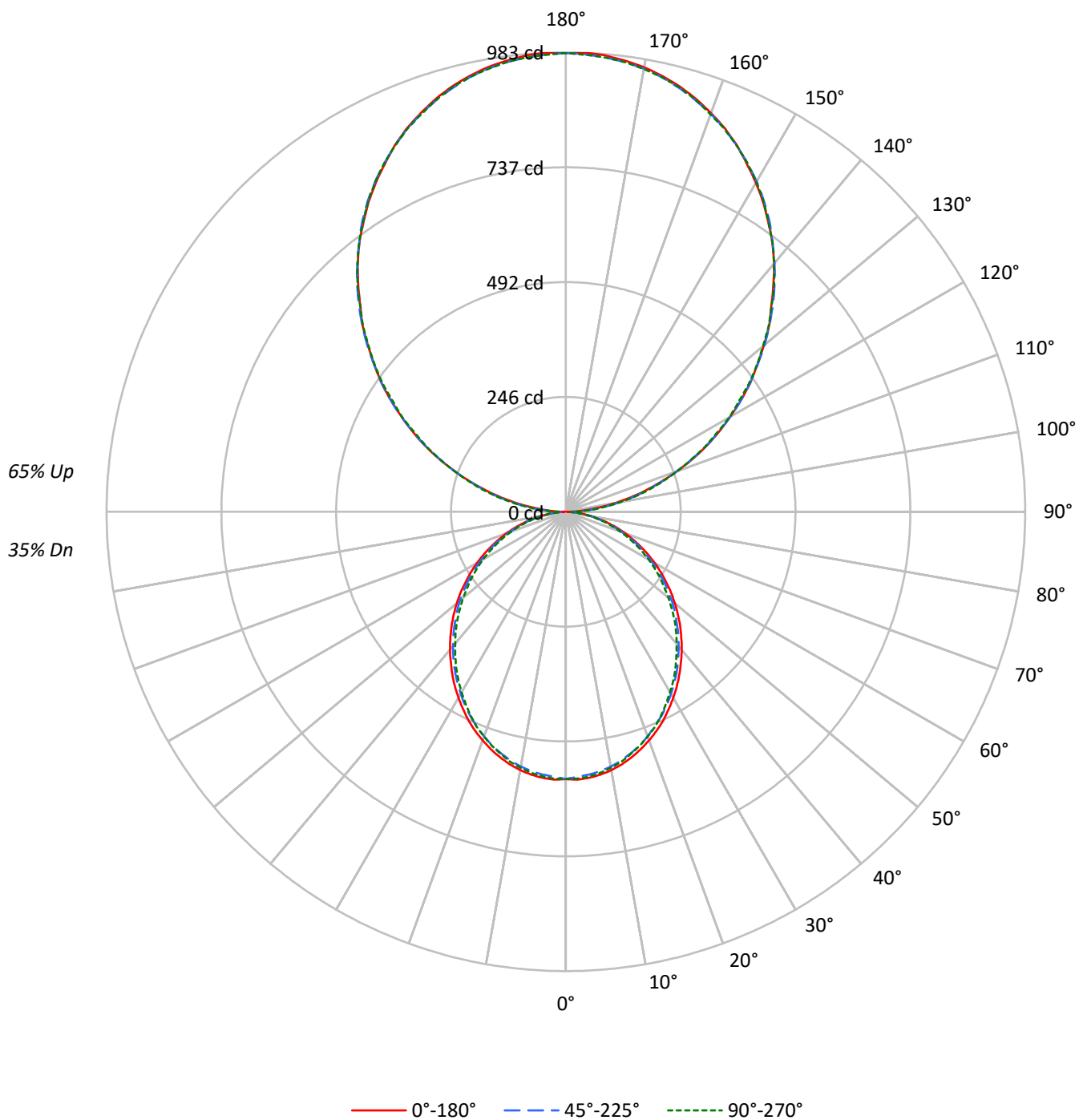
Lumens per Lamp: N/A
Luminaire Lumens: 4194.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	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	76	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°	4664	4664	4664
5°	4668	4530	4535
10°	4628	4404	4373
15°	4562	4255	4191
20°	4477	4092	4001
25°	4382	3922	3797
30°	4267	3737	3573
35°	4147	3548	3357
40°	4023	3344	3127
45°	3893	3141	2912
50°	3749	2943	2674
55°	3592	2711	2437
60°	3431	2458	2191
65°	3249	2197	1913
70°	3036	1881	1616
75°	2720	1517	1294
80°	2320	1097	910
85°	1797	610	490

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3893 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	1.3
10°-20°	151.9	3.6
20°-30°	223.5	5.3
30°-40°	259.8	6.2
40°-50°	259.8	6.2
50°-60°	227.2	5.4
60°-70°	168.7	4.0
70°-80°	95.7	2.3
80°-90°	29.5	0.7
90°-100°	64.0	1.5
100°-110°	191.7	4.6
110°-120°	325.6	7.8
120°-130°	429.4	10.2
130°-140°	482.3	11.5
140°-150°	474.0	11.3
150°-160°	398.7	9.5
160°-170°	265.3	6.3
170°-180°	92.9	2.2
0°-30°	429.3	10.2
0°-40°	689.1	16.4
0°-60°	1176.2	28.0
0°-90°	1470.1	35.1
90°-120°	581.3	13.9
90°-150°	1967.0	46.9
90°-180°	2724.0	64.9
0°-180°	4194.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	572	572	572	572	572	
5°	572	570	565	570	569	54
15°	544	542	535	538	537	153
25°	493	490	483	484	482	227
35°	424	421	414	411	409	265
45°	346	343	336	330	329	267
55°	262	260	254	248	246	234
65°	177	175	170	166	164	176
75°	94	92	90	88	88	100
85°	25	25	24	24	23	27
90°	2	11	17	21	23	5
95°	46	52	58	60	60	49
105°	177	178	181	183	185	188
115°	331	331	330	329	328	326
125°	482	482	481	480	478	430
135°	622	626	626	625	623	481
145°	756	758	759	758	756	473
155°	866	866	865	868	865	398
165°	942	940	938	943	940	266
175°	980	976	976	981	976	93
180°	982	982	982	982	982	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	571.9	571.9	571.9	571.9	571.9
2.5°	573.8	572.4	567.4	571.9	571.5
5°	571.5	569.7	564.6	569.7	568.7
7.5°	567.4	565.5	560.0	564.2	563.7
10°	561.4	559.6	553.6	557.3	556.4
12.5°	553.6	551.8	545.4	549.5	548.1
15°	544.0	542.2	535.3	538.0	536.7
17.5°	533.0	530.7	524.3	526.1	525.2
20°	520.6	518.3	511.4	512.8	511.9
22.5°	507.3	504.1	497.2	500.0	498.2
25°	492.7	489.5	483.0	483.5	481.7
27.5°	476.2	473.0	467.0	466.1	463.8
30°	459.7	456.0	450.0	448.2	445.9
32.5°	442.2	439.0	432.6	430.3	428.0
35°	423.9	420.7	414.3	411.1	408.8
37.5°	404.7	401.9	395.0	391.8	388.6
40°	385.9	382.2	375.3	370.8	368.5
42.5°	365.7	363.9	356.1	350.6	349.2
45°	346.0	342.8	335.5	330.4	329.0
47.5°	325.4	323.1	316.2	310.7	307.1
50°	304.3	302.5	296.1	289.6	286.9
52.5°	283.7	281.4	274.5	269.0	265.3
55°	261.7	260.3	253.9	248.4	245.6
57.5°	241.1	239.7	233.3	227.8	225.0
60°	219.5	217.2	211.3	207.1	204.9
62.5°	198.4	196.6	190.2	186.5	184.2
65°	177.4	175.1	170.5	165.9	163.6
67.5°	155.8	154.0	149.4	144.8	144.4
70°	136.1	132.9	129.2	125.6	124.2
72.5°	115.0	111.8	109.1	106.3	104.9
75°	94.4	92.1	89.8	88.0	87.5
77.5°	74.2	73.3	71.0	70.6	69.2
80°	56.4	55.0	54.1	53.2	52.7
82.5°	39.0	38.5	38.5	38.0	37.6
85°	24.7	24.7	23.8	23.8	23.4
87.5°	11.9	11.5	11.0	11.0	11.0
90°	2.3	10.6	16.7	21.3	22.8
92.5°	19.7	29.6	33.4	35.7	36.4
95°	45.6	52.4	57.7	60.0	60.0
97.5°	72.9	79.0	85.0	88.1	88.1
100°	106.3	109.3	116.2	117.7	117.7
102.5°	141.2	142.0	148.1	150.3	151.1
105°	176.9	177.7	180.7	183.0	185.3
107.5°	214.1	214.9	215.6	218.7	217.9
110°	252.1	253.6	252.8	251.3	253.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.6	291.6	290.0	290.0	290.0
115°	331.0	331.0	329.5	328.8	328.0
117.5°	368.2	368.2	367.5	365.2	362.9
120°	405.4	408.5	406.2	402.4	403.9
122.5°	444.2	444.9	444.2	441.9	438.1
125°	482.1	482.1	481.4	479.8	478.3
127.5°	516.3	518.6	517.1	515.5	514.8
130°	552.7	555.0	555.0	553.5	550.5
132.5°	589.9	591.5	590.7	589.2	588.4
135°	621.8	626.4	626.4	624.9	622.6
137.5°	657.5	659.8	661.3	659.0	659.8
140°	693.2	694.7	694.7	694.0	693.2
142.5°	725.8	727.4	726.6	726.6	726.6
145°	755.5	758.5	759.3	758.5	756.2
147.5°	785.8	789.6	788.9	788.1	787.3
150°	813.2	816.2	816.2	816.2	815.4
152.5°	839.0	840.5	841.3	843.5	841.3
155°	865.6	865.6	864.8	867.8	864.8
157.5°	888.3	886.8	886.8	889.1	886.8
160°	908.1	907.3	906.5	908.8	905.0
162.5°	926.3	924.0	923.3	927.8	924.0
165°	942.2	940.0	938.4	943.0	940.0
167.5°	955.1	952.1	952.1	956.7	952.1
170°	965.8	962.0	962.7	967.3	962.0
172.5°	973.4	970.3	970.3	975.6	970.3
175°	980.2	976.4	975.6	981.0	975.6
177.5°	983.2	979.4	979.4	984.8	978.7
180°	981.7	981.7	981.7	981.7	981.7

(END OF REPORT)