

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: P1001390

Luminaire Tested: SA4XXDIP-B350D810UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001390
REPORT IS A COMBINATION OF REPORTS P996009 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-F4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

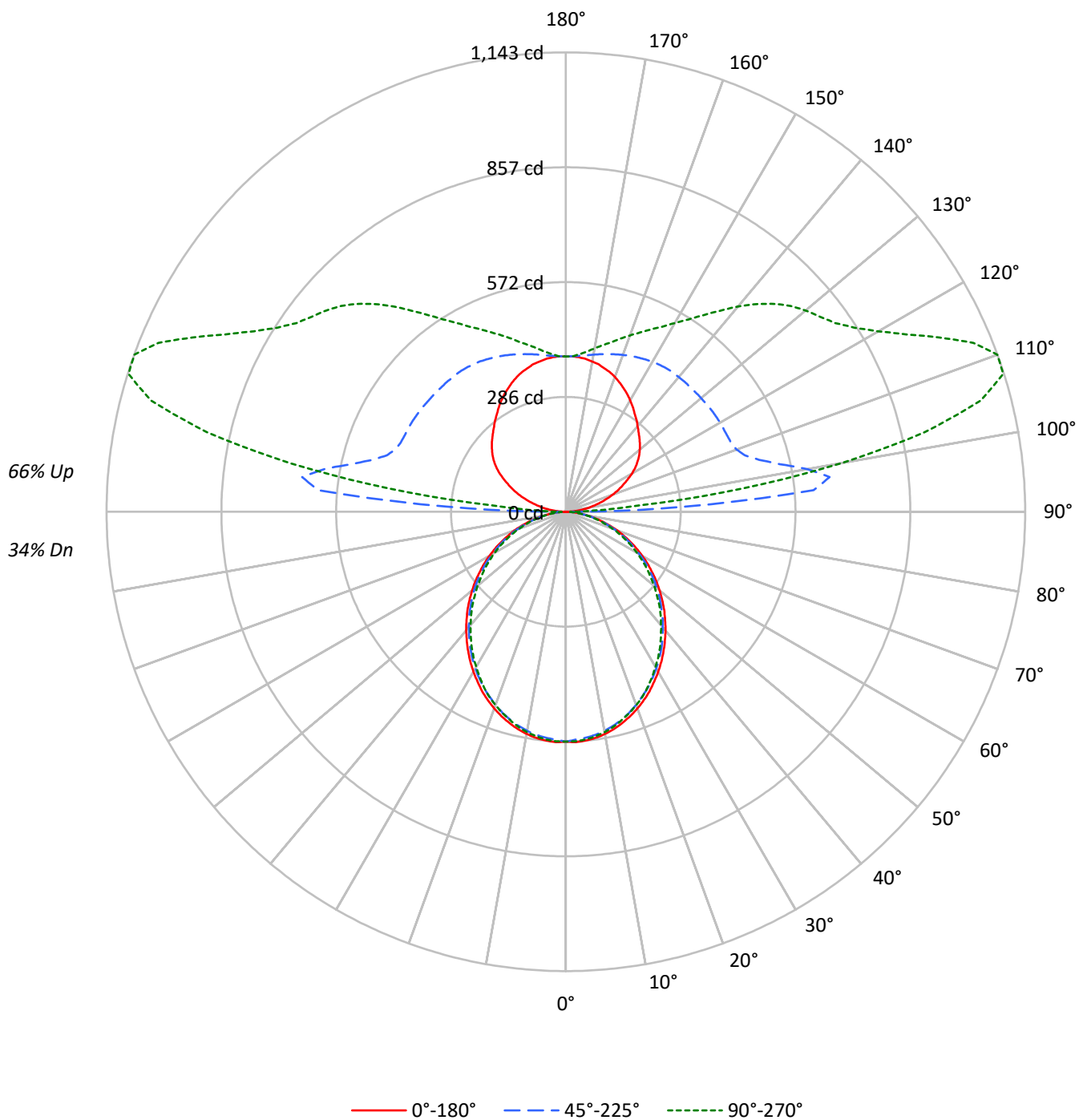
Lumens per Lamp: N/A
Luminaire Lumens: 4289.6 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35
2	86	79	73	68	77	71	66	62	57	54	50	44	42	40	32	31	30
3	78	69	62	56	70	63	56	51	50	46	42	39	36	34	29	27	25
4	71	61	53	47	64	55	49	44	45	40	36	35	31	29	26	23	22
5	66	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	21	18	17
7	56	44	36	31	50	40	33	28	32	27	24	26	22	19	19	17	15
8	52	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	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	3.5
20°-30°	223.5	5.2
30°-40°	259.8	6.1
40°-50°	259.8	6.1
50°-60°	227.2	5.3
60°-70°	168.7	3.9
70°-80°	95.7	2.2
80°-90°	28.9	0.7
90°-100°	287.0	6.7
100°-110°	583.8	13.6
110°-120°	520.4	12.1
120°-130°	437.1	10.2
130°-140°	364.8	8.5
140°-150°	278.6	6.5
150°-160°	195.8	4.6
160°-170°	115.2	2.7
170°-180°	37.4	0.9
0°-30°	429.3	10.0
0°-40°	689.1	16.1
0°-60°	1176.2	27.4
0°-90°	1469.5	34.3
90°-120°	1391.3	32.4
90°-150°	2471.7	57.6
90°-180°	2820.0	65.7
0°-180°	4289.6	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°	1	6	14	15	16	3
95°	25	79	619	306	185	27
105°	89	129	498	1072	1068	95
115°	156	196	444	853	1026	155
125°	218	259	442	726	818	194
135°	259	308	438	645	732	200
145°	298	342	436	544	598	187
155°	339	366	424	480	500	157
165°	370	381	406	430	436	104
175°	386	386	390	395	393	37
180°	386	386	386	386	386	

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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°	0.8	6.1	13.7	15.2	15.9
92.5°	10.6	58.4	297.6	98.3	69.1
95°	25.1	79.0	618.7	306.4	185.2
97.5°	41.8	87.3	662.0	625.6	444.9
100°	57.7	98.6	610.4	865.5	696.2
102.5°	72.9	112.4	545.9	1015.8	914.8
105°	88.8	128.7	498.0	1072.4	1068.2
107.5°	106.3	145.4	466.9	1055.3	1141.1
110°	123.7	162.0	452.5	994.6	1142.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	140.5	178.8	445.6	920.2	1097.8
115°	156.4	196.2	444.1	853.4	1025.7
117.5°	173.1	212.6	443.4	801.0	955.1
120°	189.8	228.5	443.4	765.7	897.4
122.5°	205.0	244.0	442.6	742.5	851.8
125°	217.9	258.9	441.9	726.2	818.4
127.5°	230.0	272.5	440.3	710.6	797.2
130°	239.9	285.8	439.6	692.0	778.9
132.5°	249.8	297.2	438.8	670.0	758.4
135°	258.9	308.2	438.1	644.6	731.9
137.5°	268.0	317.7	438.1	617.2	700.7
140°	277.9	326.5	437.3	590.7	666.6
142.5°	288.5	334.4	437.3	566.0	630.1
145°	298.4	341.6	435.8	543.6	597.5
147.5°	309.8	348.5	433.5	525.0	567.1
150°	320.4	354.9	431.2	507.9	542.1
152.5°	330.3	361.0	427.4	493.5	519.3
155°	339.4	366.3	423.6	479.8	500.3
157.5°	348.5	371.2	419.8	466.9	482.8
160°	356.8	375.4	415.3	454.0	466.9
162.5°	364.4	378.8	410.7	441.4	451.7
165°	369.7	381.1	406.2	430.1	436.5
167.5°	375.8	383.0	401.6	420.2	424.4
170°	379.6	384.5	397.1	410.4	413.0
172.5°	383.4	385.6	392.5	401.6	401.6
175°	385.7	386.4	389.5	394.8	393.3
177.5°	387.2	386.4	387.2	389.8	387.2
180°	386.4	386.4	386.4	386.4	386.4

(END OF REPORT)