

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: P1001399

Luminaire Tested: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001399
REPORT IS A COMBINATION OF REPORTS P996018 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-F4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

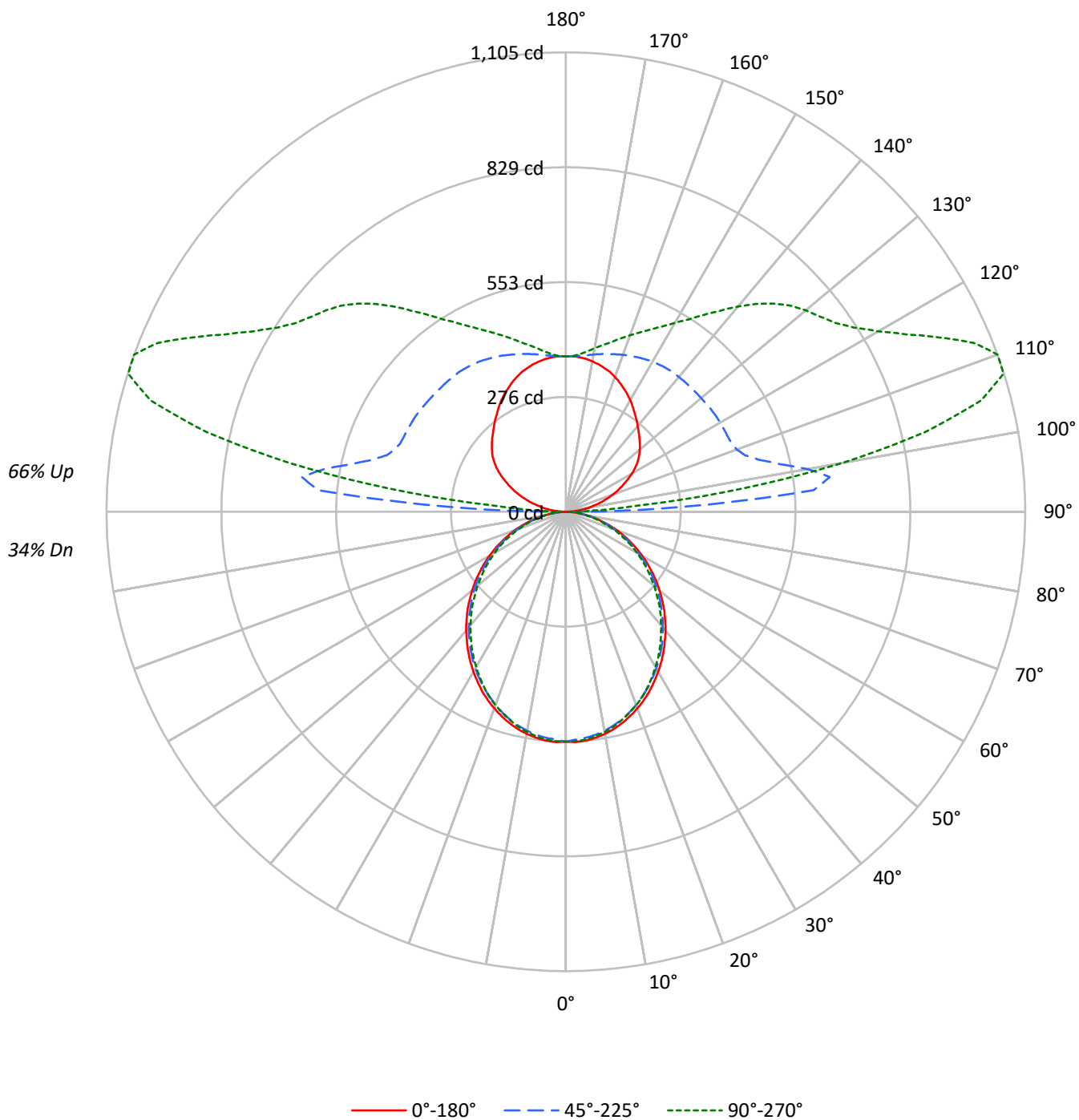
Lumens per Lamp: N/A
Luminaire Lumens: 4148.4 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.3
10°-20°	146.8	3.5
20°-30°	216.1	5.2
30°-40°	251.2	6.1
40°-50°	251.1	6.1
50°-60°	219.6	5.3
60°-70°	163.1	3.9
70°-80°	92.5	2.2
80°-90°	27.9	0.7
90°-100°	277.7	6.7
100°-110°	564.7	13.6
110°-120°	503.4	12.1
120°-130°	422.8	10.2
130°-140°	352.9	8.5
140°-150°	269.5	6.5
150°-160°	189.4	4.6
160°-170°	111.4	2.7
170°-180°	36.2	0.9
0°-30°	415.0	10.0
0°-40°	666.1	16.1
0°-60°	1136.9	27.4
0°-90°	1420.4	34.2
90°-120°	1345.8	32.4
90°-150°	2390.9	57.6
90°-180°	2728.0	65.8
0°-180°	4148.4	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°	1	6	13	15	15	3
95°	24	76	598	296	179	27
105°	86	124	482	1037	1033	92
115°	151	190	430	825	992	150
125°	211	250	427	702	792	188
135°	250	298	424	624	708	194
145°	289	330	422	526	578	181
155°	328	354	410	464	484	151
165°	358	369	393	416	422	101
175°	373	374	377	382	380	35
180°	374	374	374	374	374	

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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°	0.7	5.9	13.2	14.7	15.4
92.5°	10.3	56.6	287.9	95.1	66.8
95°	24.2	76.4	598.5	296.3	179.2
97.5°	40.4	84.4	640.4	605.2	430.4
100°	55.8	95.4	590.5	837.2	673.4
102.5°	70.5	108.7	528.0	982.6	884.9
105°	85.9	124.4	481.8	1037.4	1033.3
107.5°	102.8	140.6	451.7	1020.8	1103.8
110°	119.7	156.8	437.7	962.0	1105.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.9	173.0	431.1	890.1	1061.9
115°	151.3	189.9	429.6	825.4	992.2
117.5°	167.4	205.6	428.9	774.8	923.9
120°	183.6	221.0	428.9	740.7	868.1
122.5°	198.3	236.1	428.2	718.2	824.0
125°	210.8	250.4	427.4	702.4	791.7
127.5°	222.5	263.6	425.9	687.4	771.1
130°	232.1	276.5	425.2	669.4	753.5
132.5°	241.6	287.5	424.5	648.1	733.7
135°	250.4	298.2	423.7	623.5	708.0
137.5°	259.2	307.4	423.7	597.1	677.8
140°	268.8	315.8	423.0	571.3	644.8
142.5°	279.1	323.5	423.0	547.4	609.5
145°	288.6	330.5	421.5	525.8	578.0
147.5°	299.6	337.0	419.3	507.8	548.6
150°	309.9	343.4	417.1	491.3	524.4
152.5°	319.5	349.2	413.5	477.4	502.3
155°	328.3	354.4	409.8	464.1	484.0
157.5°	337.1	359.1	406.1	451.6	467.1
160°	345.2	363.2	401.7	439.2	451.7
162.5°	352.5	366.4	397.3	427.0	437.0
165°	357.7	368.7	392.9	416.0	422.3
167.5°	363.5	370.5	388.5	406.5	410.5
170°	367.2	372.0	384.1	396.9	399.5
172.5°	370.9	373.0	379.7	388.5	388.5
175°	373.1	373.8	376.7	381.9	380.4
177.5°	374.5	373.8	374.5	377.1	374.5
180°	373.8	373.8	373.8	373.8	373.8

(END OF REPORT)