

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: P1001369

Luminaire Tested: SA4XXDIP-B350D810UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001369
REPORT IS A COMBINATION OF REPORTS P995988 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D810UB30-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

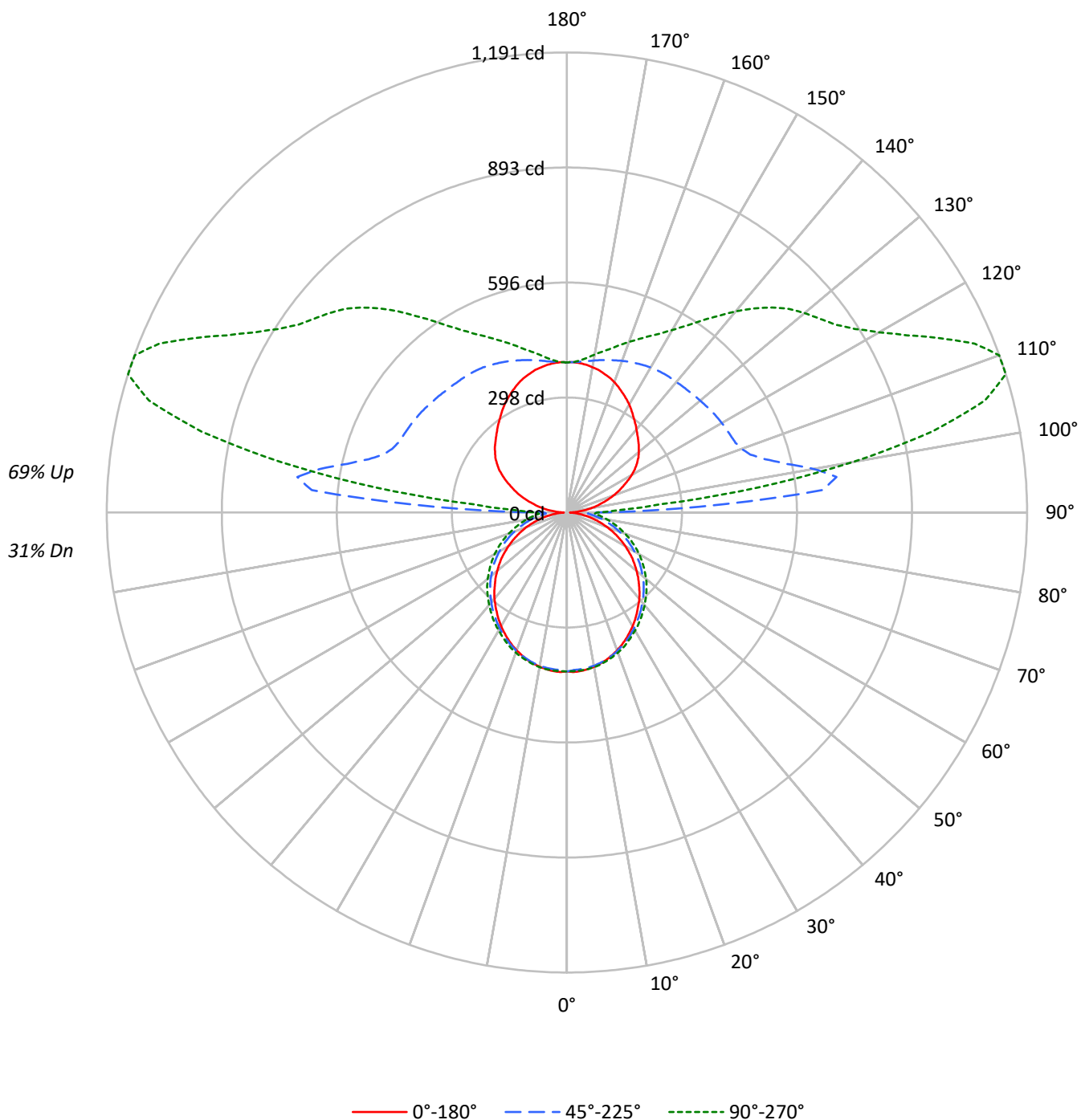
Lumens per Lamp: N/A
Luminaire Lumens: 4241.7 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	92	92	92	92	73	73	73	55	55	55	38	38	38
1	93	88	84	81	83	79	76	73	63	60	58	47	46	44	33	32	31
2	84	77	71	65	75	69	64	59	54	51	48	41	38	36	29	27	26
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	22
4	70	59	51	45	62	53	47	41	42	37	33	32	28	26	22	20	18
5	64	53	44	39	57	47	40	35	38	32	29	28	25	22	20	18	16
6	59	47	39	33	52	42	35	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	48	38	31	26	30	25	22	23	20	17	16	14	12
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	31	25	20	25	20	17	19	16	13	14	11	10
10	43	32	25	20	39	29	22	18	23	18	15	18	14	12	13	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3356	3356	3356
5°	3365	3268	3274
10°	3343	3204	3194
15°	3312	3132	3105
20°	3265	3054	3018
25°	3213	2967	2925
30°	3157	2881	2829
35°	3093	2794	2744
40°	3041	2710	2656
45°	2966	2631	2577
50°	2901	2542	2495
55°	2833	2455	2400
60°	2729	2348	2311
65°	2617	2233	2205
70°	2479	2100	2080
75°	2285	1954	1962
80°	2065	1803	1838
85°	1776	1653	1738

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2966 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	0.9
10°-20°	111.7	2.6
20°-30°	168.9	4.0
30°-40°	204.4	4.8
40°-50°	216.0	5.1
50°-60°	203.3	4.8
60°-70°	168.7	4.0
70°-80°	118.4	2.8
80°-90°	68.2	1.6
90°-100°	328.5	7.7
100°-110°	616.8	14.5
110°-120°	543.3	12.8
120°-130°	450.9	10.6
130°-140°	371.8	8.8
140°-150°	281.2	6.6
150°-160°	197.0	4.6
160°-170°	115.9	2.7
170°-180°	37.7	0.9
0°-30°	319.6	7.5
0°-40°	524.0	12.4
0°-60°	943.3	22.2
0°-90°	1298.7	30.6
90°-120°	1488.6	35.1
90°-150°	2592.4	61.1
90°-180°	2943.0	69.4
0°-180°	4241.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	412	411	407	411	411	39
15°	395	395	394	398	398	111
25°	361	364	365	370	371	166
35°	316	322	326	333	334	198
45°	264	272	281	289	291	204
55°	206	216	230	239	242	184
65°	143	158	173	185	188	142
75°	79	96	116	129	133	84
85°	24	44	64	78	83	25
90°	8	32	59	74	79	7
95°	31	101	663	361	243	32
105°	94	143	531	1121	1120	100
115°	160	204	468	890	1067	159
125°	221	262	457	752	848	197
135°	261	311	445	660	751	202
145°	301	344	438	550	606	189
155°	341	369	426	483	503	157
165°	372	383	409	433	439	105
175°	388	389	392	397	396	37
180°	389	389	389	389	389	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	411.5	411.5	411.5	411.5	411.5
2.5°	413.4	412.0	408.3	411.5	411.0
5°	412.0	410.6	407.4	411.0	410.6
7.5°	409.2	408.3	405.5	409.7	409.2
10°	405.5	405.1	402.8	406.9	406.4
12.5°	400.4	400.4	399.1	402.8	402.8
15°	394.9	395.4	394.0	398.1	397.7
17.5°	387.5	388.9	388.5	392.6	392.2
20°	379.7	381.1	381.6	386.2	386.2
22.5°	371.0	372.8	373.7	378.3	379.3
25°	361.3	364.0	365.4	370.5	371.0
27.5°	350.7	354.8	356.7	361.3	361.7
30°	340.1	343.8	347.0	352.1	353.0
32.5°	328.6	333.2	336.9	342.8	343.8
35°	316.1	321.6	326.3	332.7	334.1
37.5°	303.7	310.1	315.7	322.1	323.5
40°	291.7	297.7	304.1	311.1	312.9
42.5°	277.9	284.8	292.6	300.5	301.8
45°	263.6	272.3	281.1	288.9	291.2
47.5°	250.2	259.0	269.1	277.0	279.7
50°	235.5	245.6	255.8	265.0	267.7
52.5°	220.7	230.9	242.8	252.1	254.8
55°	206.4	216.1	229.9	239.2	241.9
57.5°	190.3	202.3	215.7	226.7	229.0
60°	174.6	186.6	201.8	212.4	216.1
62.5°	159.4	172.8	188.0	198.6	202.3
65°	142.9	157.6	173.3	184.8	188.5
67.5°	127.2	142.9	159.4	171.0	174.6
70°	111.1	126.7	144.2	156.7	159.9
72.5°	95.4	111.5	130.4	142.4	146.1
75°	79.3	96.3	115.7	128.6	132.7
77.5°	64.1	82.0	102.3	115.2	119.8
80°	50.2	68.7	88.9	102.8	106.4
82.5°	36.4	55.8	76.0	90.3	94.5
85°	24.4	43.8	64.5	78.3	82.9
87.5°	15.2	34.1	54.4	67.7	71.9
90°	8.2	31.9	59.3	74.3	78.7
92.5°	17.6	81.8	342.3	154.8	128.9
95°	31.2	100.6	662.6	360.6	243.1
97.5°	47.5	106.8	703.8	679.2	501.5
100°	63.1	116.4	649.1	918.2	751.1
102.5°	78.4	128.2	581.9	1066.6	968.8
105°	93.5	142.8	531.4	1120.8	1120.2
107.5°	111.0	158.2	497.8	1101.2	1190.9
110°	128.2	173.2	481.5	1037.4	1190.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	144.5	188.7	472.3	959.8	1142.2
115°	160.1	204.3	468.5	890.3	1066.9
117.5°	176.9	219.4	465.4	834.8	993.5
120°	193.2	233.6	463.1	796.6	932.8
122.5°	208.5	247.8	460.0	771.0	884.2
125°	221.0	261.8	457.4	752.3	847.8
127.5°	233.2	275.6	453.6	733.8	824.1
130°	242.8	288.4	450.5	712.8	803.0
132.5°	252.7	299.9	448.0	688.3	780.1
135°	261.3	311.0	444.8	660.0	750.6
137.5°	270.5	320.2	443.0	630.2	716.5
140°	280.4	329.0	440.8	601.2	679.8
142.5°	290.7	337.0	439.9	574.5	640.8
145°	300.7	343.7	438.4	549.7	605.7
147.5°	312.1	350.5	436.1	528.6	572.8
150°	322.8	357.0	433.8	511.0	545.3
152.5°	332.2	363.2	430.0	496.4	522.4
155°	341.4	368.6	426.2	482.7	503.3
157.5°	350.6	373.5	422.4	469.7	485.8
160°	359.0	377.7	417.8	456.8	469.7
162.5°	366.6	381.2	413.2	444.2	454.4
165°	372.0	383.4	408.6	432.7	439.2
167.5°	378.1	385.3	404.0	422.8	427.0
170°	381.9	386.8	399.5	412.8	415.5
172.5°	385.7	388.0	394.9	404.0	404.0
175°	388.0	388.8	391.8	397.2	395.6
177.5°	389.5	388.8	389.5	392.2	389.5
180°	388.8	388.8	388.8	388.8	388.8

(END OF REPORT)