

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: P1001309

Luminaire Tested: SA4XXDIP-B350D590UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001309
REPORT IS A COMBINATION OF REPORTS P995928 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D590UB30-4F0-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

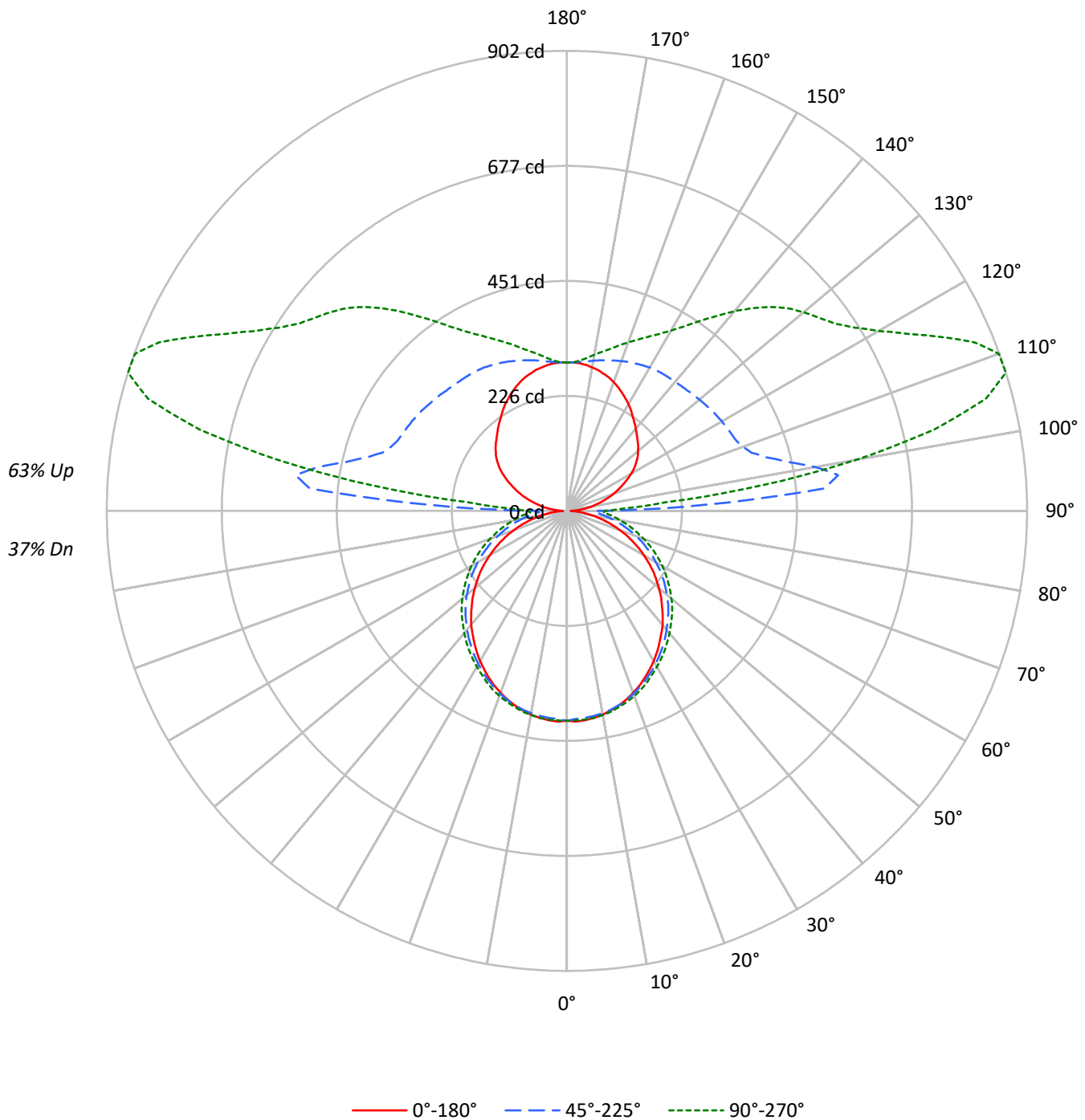
Lumens per Lamp: N/A
Luminaire Lumens: 3527.2 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 28.4
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	76	76	76	59	59	59	44	44	44
1	94	90	85	82	85	81	78	75	65	63	61	51	49	48	38	37	36
2	85	78	71	66	77	70	65	60	57	53	50	44	42	39	33	31	29
3	78	68	61	55	70	62	55	50	50	45	41	39	36	33	29	27	25
4	71	60	52	46	64	54	48	42	44	39	35	34	31	28	25	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14
8	51	39	31	26	46	35	28	24	29	24	20	23	19	16	17	14	12
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	16	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	16	13	15	12	10

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	1.1
10°-20°	111.7	3.2
20°-30°	168.9	4.8
30°-40°	204.4	5.8
40°-50°	216.0	6.1
50°-60°	203.3	5.8
60°-70°	168.7	4.8
70°-80°	118.4	3.4
80°-90°	67.9	1.9
90°-100°	255.8	7.3
100°-110°	468.9	13.3
110°-120°	411.5	11.7
120°-130°	340.2	9.6
130°-140°	279.4	7.9
140°-150°	210.7	6.0
150°-160°	147.4	4.2
160°-170°	86.7	2.5
170°-180°	28.2	0.8
0°-30°	319.6	9.1
0°-40°	524.0	14.9
0°-60°	943.3	26.7
0°-90°	1298.3	36.8
90°-120°	1136.3	32.2
90°-150°	1966.6	55.8
90°-180°	2229.0	63.2
0°-180°	3527.2	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	30	56	70	75	6
95°	25	81	506	283	196	25
105°	71	110	405	849	850	76
115°	120	155	356	674	807	120
125°	166	196	346	568	640	148
135°	196	233	334	497	565	151
145°	225	257	328	412	454	141
155°	256	276	319	361	377	118
165°	278	287	306	324	329	79
175°	290	291	293	297	296	28
180°	291	291	291	291	291	

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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°	8.0	30.4	55.9	70.4	74.7
92.5°	14.9	67.0	266.9	129.9	111.4
95°	24.9	80.6	505.9	283.1	196.2
97.5°	36.9	84.6	536.2	520.8	388.8
100°	48.5	91.4	494.5	699.0	574.8
102.5°	60.0	99.8	443.6	809.4	737.1
105°	71.0	110.3	405.3	849.2	849.8
107.5°	84.1	121.4	379.6	834.1	901.9
110°	96.9	132.1	366.9	785.6	900.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	108.9	143.4	359.5	726.8	864.3
115°	120.5	154.6	356.1	674.2	807.2
117.5°	133.1	165.5	353.2	632.0	751.7
120°	145.2	175.7	350.9	602.7	705.6
122.5°	156.6	186.0	347.9	583.0	668.5
125°	165.8	196.3	345.5	568.4	640.5
127.5°	175.0	206.6	342.1	553.8	622.2
130°	182.0	216.1	339.2	537.6	605.8
132.5°	189.4	224.6	336.9	518.7	588.1
135°	195.8	233.0	333.9	496.8	565.3
137.5°	202.7	239.7	332.1	473.8	539.0
140°	210.1	246.2	330.1	451.6	511.0
142.5°	217.7	252.2	329.2	431.2	481.3
145°	225.1	257.2	328.1	412.0	454.4
147.5°	233.7	262.4	326.4	395.8	429.3
150°	241.7	267.2	324.6	382.4	408.1
152.5°	248.6	271.8	321.8	371.5	390.9
155°	255.5	275.8	318.9	361.2	376.7
157.5°	262.3	279.5	316.1	351.5	363.5
160°	268.6	282.6	312.6	341.8	351.5
162.5°	274.3	285.2	309.2	332.4	340.1
165°	278.3	286.9	305.8	323.8	328.6
167.5°	282.9	288.4	302.4	316.4	319.5
170°	285.8	289.5	298.9	309.0	310.9
172.5°	288.6	290.4	295.5	302.4	302.4
175°	290.4	290.9	293.2	297.2	296.1
177.5°	291.5	290.9	291.5	293.5	291.5
180°	290.9	290.9	290.9	290.9	290.9

(END OF REPORT)