

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: P1001284

Luminaire Tested: SA4XXDIP-B350D590UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001284
REPORT IS A COMBINATION OF REPORTS P995903 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D590UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

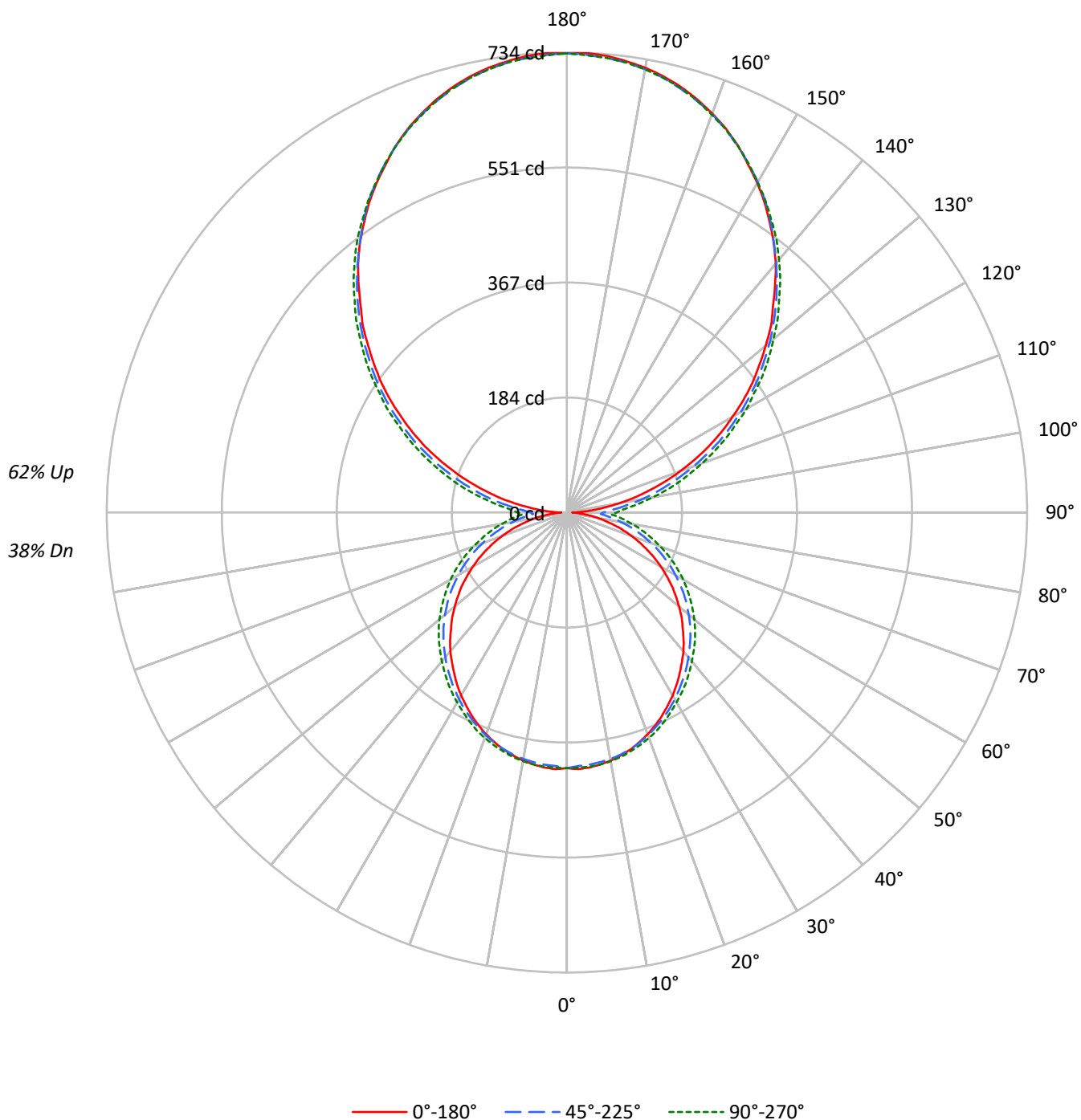
Lumens per Lamp: N/A
Luminaire Lumens: 3425.0 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45	38		
1	94	90	86	82	85	81	78	75	66	63	61	51	50	48	38	37	36	30		
2	85	78	71	66	77	71	65	61	57	53	50	45	42	40	33	31	30	25		
3	78	68	61	55	70	62	55	50	50	45	42	39	36	33	29	27	25	20		
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17		
5	65	53	45	39	59	48	41	36	39	34	30	31	27	24	23	21	18	15		
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16	13		
7	55	43	35	29	50	39	32	27	32	27	23	25	21	18	19	16	14	11		
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	15	13	10		
9	47	35	28	23	43	32	26	21	27	21	18	21	17	15	16	13	11	9		
10	44	32	25	20	40	30	23	19	24	19	16	20	16	13	15	12	10	8		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3327	3327	3327
5°	3336	3240	3246
10°	3314	3176	3168
15°	3283	3105	3079
20°	3238	3027	2993
25°	3186	2942	2900
30°	3130	2857	2805
35°	3066	2770	2720
40°	3015	2687	2633
45°	2940	2609	2555
50°	2877	2520	2474
55°	2810	2435	2380
60°	2707	2328	2292
65°	2593	2214	2186
70°	2456	2082	2062
75°	2265	1937	1946
80°	2048	1789	1822
85°	1761	1640	1723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2940 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	1.1
10°-20°	110.8	3.2
20°-30°	167.5	4.9
30°-40°	202.6	5.9
40°-50°	214.2	6.3
50°-60°	201.6	5.9
60°-70°	167.3	4.9
70°-80°	117.4	3.4
80°-90°	67.7	2.0
90°-100°	87.1	2.5
100°-110°	172.2	5.0
110°-120°	262.5	7.7
120°-130°	331.4	9.7
130°-140°	364.6	10.6
140°-150°	354.7	10.4
150°-160°	297.5	8.7
160°-170°	197.9	5.8
170°-180°	69.3	2.0
0°-30°	316.9	9.3
0°-40°	519.5	15.2
0°-60°	935.3	27.3
0°-90°	1287.7	37.6
90°-120°	521.9	15.2
90°-150°	1572.6	45.9
90°-180°	2137.0	62.4
0°-180°	3425.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	408	407	39
15°	392	392	391	395	394	110
25°	358	361	362	367	368	165
35°	313	319	324	330	331	196
45°	261	270	279	286	289	202
55°	205	214	228	237	240	182
65°	142	156	172	183	187	140
75°	79	96	115	128	132	84
85°	24	43	64	78	82	25
90°	9	34	58	74	79	7
95°	40	60	83	97	101	42
105°	136	146	165	178	183	145
115°	250	254	267	277	279	246
125°	362	361	372	380	381	322
135°	465	468	472	478	479	360
145°	564	566	566	569	569	353
155°	646	646	645	648	645	297
165°	703	701	700	704	701	198
175°	731	728	728	732	728	69
180°	732	732	732	732	732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	408.0	408.0	408.0	408.0	408.0
2.5°	409.8	408.4	404.8	408.0	407.5
5°	408.4	407.1	403.9	407.5	407.1
7.5°	405.7	404.8	402.0	406.2	405.7
10°	402.0	401.6	399.3	403.4	403.0
12.5°	397.0	397.0	395.7	399.3	399.3
15°	391.5	392.0	390.6	394.7	394.3
17.5°	384.2	385.6	385.1	389.3	388.8
20°	376.5	377.8	378.3	382.9	382.9
22.5°	367.8	369.6	370.5	375.1	376.0
25°	358.2	360.9	362.3	367.3	367.8
27.5°	347.7	351.8	353.6	358.2	358.6
30°	337.2	340.8	344.0	349.1	350.0
32.5°	325.8	330.3	334.0	339.9	340.8
35°	313.4	318.9	323.5	329.9	331.2
37.5°	301.1	307.5	313.0	319.4	320.7
40°	289.2	295.1	301.5	308.4	310.2
42.5°	275.5	282.3	290.1	297.9	299.3
45°	261.3	270.0	278.7	286.5	288.7
47.5°	248.1	256.8	266.8	274.6	277.3
50°	233.5	243.5	253.6	262.7	265.4
52.5°	218.8	228.9	240.8	249.9	252.7
55°	204.7	214.3	228.0	237.1	239.9
57.5°	188.7	200.6	213.8	224.8	227.1
60°	173.2	185.0	200.1	210.6	214.3
62.5°	158.1	171.3	186.4	196.9	200.6
65°	141.6	156.3	171.8	183.2	186.9
67.5°	126.1	141.6	158.1	169.5	173.2
70°	110.1	125.6	143.0	155.3	158.5
72.5°	94.6	110.6	129.3	141.2	144.8
75°	78.6	95.5	114.7	127.5	131.6
77.5°	63.5	81.3	101.4	114.2	118.8
80°	49.8	68.1	88.2	101.9	105.5
82.5°	36.1	55.3	75.4	89.5	93.7
85°	24.2	43.4	64.0	77.7	82.2
87.5°	15.1	33.8	53.9	67.2	71.3
90°	9.0	33.5	57.7	74.4	79.1
92.5°	21.6	44.9	67.4	81.9	86.1
95°	39.9	60.1	82.8	96.9	101.0
97.5°	59.9	77.6	100.9	115.0	119.2
100°	84.3	98.5	121.4	134.9	138.1
102.5°	110.4	121.0	142.9	156.5	160.7
105°	136.1	145.8	165.0	178.1	183.4
107.5°	163.9	172.2	188.8	202.5	205.1
110°	191.8	199.3	214.6	224.0	229.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.7	226.2	240.2	250.2	253.9
115°	249.7	253.9	267.4	276.8	279.4
117.5°	277.5	280.3	293.4	301.3	303.2
120°	304.8	308.5	320.0	326.3	331.1
122.5°	333.7	334.3	346.0	353.5	353.9
125°	361.5	361.1	372.0	379.5	381.1
127.5°	387.0	388.3	396.3	403.4	406.0
130°	413.8	415.0	422.3	429.4	429.9
132.5°	441.6	442.2	447.1	453.8	456.0
135°	464.9	468.3	471.5	477.6	478.7
137.5°	491.5	492.8	495.7	500.8	503.7
140°	518.1	518.9	519.3	524.7	526.3
142.5°	542.1	543.2	542.2	547.2	549.1
145°	564.2	565.9	566.5	568.6	568.9
147.5°	586.8	589.2	588.6	588.5	589.8
150°	607.2	609.0	609.0	609.0	608.4
152.5°	626.0	627.1	627.7	629.4	627.7
155°	645.8	645.8	645.3	647.5	645.3
157.5°	662.8	661.7	661.7	663.4	661.7
160°	677.6	677.0	676.4	678.1	675.3
162.5°	691.2	689.5	688.9	692.3	689.5
165°	703.0	701.3	700.2	703.6	701.3
167.5°	712.7	710.4	710.4	713.8	710.4
170°	720.6	717.8	718.3	721.7	717.8
172.5°	726.3	724.0	724.0	728.0	724.0
175°	731.4	728.5	728.0	731.9	728.0
177.5°	733.6	730.8	730.8	734.8	730.2
180°	732.5	732.5	732.5	732.5	732.5

(END OF REPORT)