

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: P1001354

Luminaire Tested: SA4XXDIP-B350D810UB2750-4F0-XX-W2A-D_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001354
REPORT IS A COMBINATION OF REPORTS P995973 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D810UB2750-4F0-XX-W2A-D_2700K
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

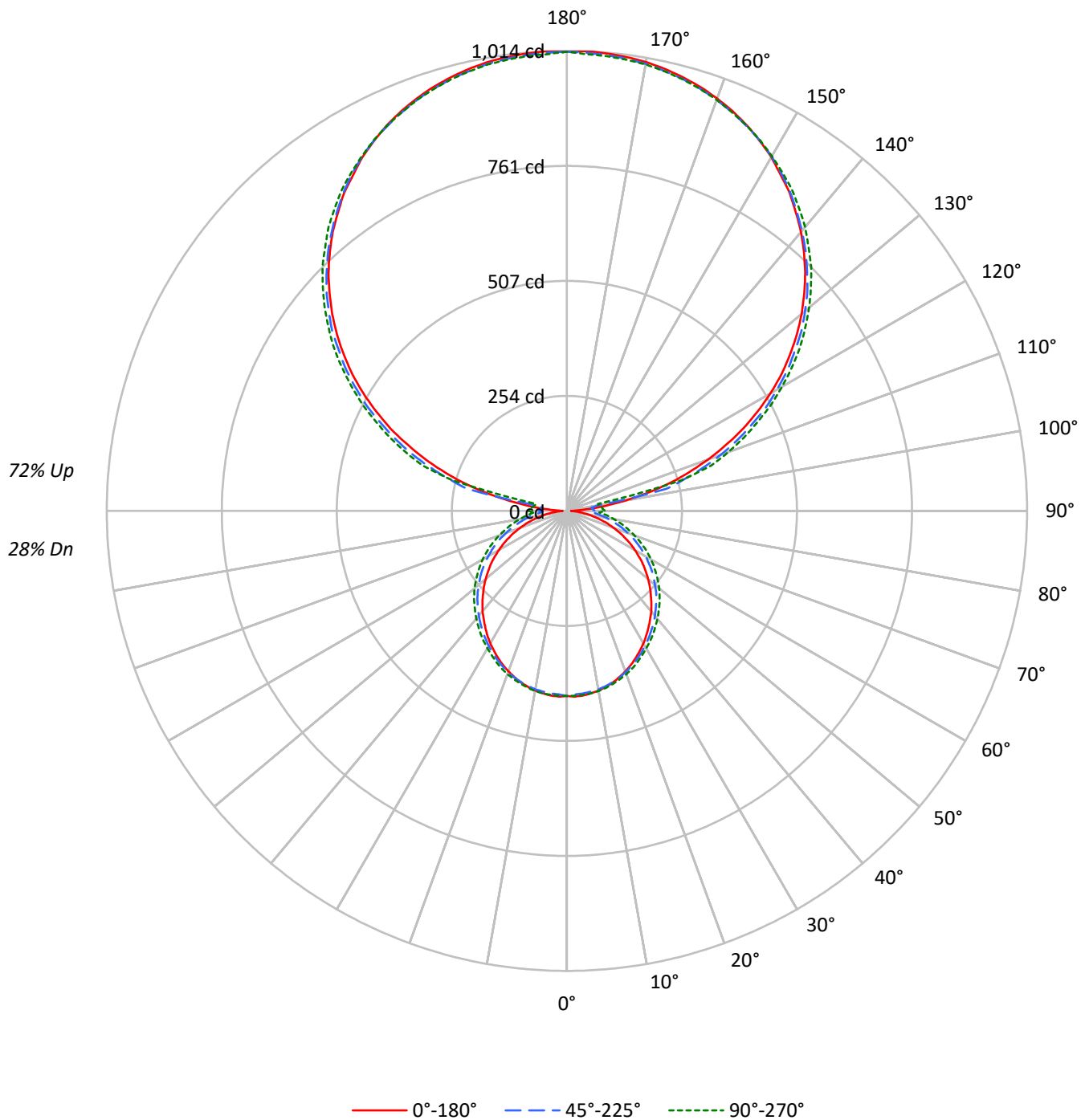
Lumens per Lamp: N/A
Luminaire Lumens: 4525.0 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
Input Voltage (V): 120
Input Current (A_{in}): 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	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36			28
1	92	88	84	80	82	79	75	72	62	59	57	46	44	43	31	30	29			23
2	84	76	70	65	75	68	63	59	54	50	47	40	37	35	27	26	24			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	20			15
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	22	19	17	15			11
6	59	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13			10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	16	13	12			9
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10			8
9	46	34	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9			7
10	43	31	24	20	39	28	22	18	23	18	15	17	14	12	12	10	8			6

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: 90°

Luminance: 3131 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.9
10°-20°	110.8	2.4
20°-30°	167.5	3.7
30°-40°	202.6	4.5
40°-50°	214.2	4.7
50°-60°	201.6	4.5
60°-70°	167.3	3.7
70°-80°	117.4	2.6
80°-90°	68.3	1.5
90°-100°	73.0	1.6
100°-110°	250.4	5.5
110°-120°	442.1	9.8
120°-130°	547.4	12.1
130°-140°	578.6	12.8
140°-150°	537.5	11.9
150°-160°	432.7	9.6
160°-170°	279.0	6.2
170°-180°	96.2	2.1
0°-30°	316.9	7.0
0°-40°	519.5	11.5
0°-60°	935.3	20.7
0°-90°	1288.2	28.5
90°-120°	765.5	16.9
90°-150°	2428.9	53.7
90°-180°	3237.0	71.5
0°-180°	4525.0	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°	10	36	62	80	85	7
95°	48	37	56	73	78	56
105°	232	246	266	285	261	243
115°	428	435	448	460	463	422
125°	600	602	612	623	627	536
135°	743	742	748	757	761	573
145°	856	858	858	861	865	535
155°	938	939	936	940	937	433
165°	989	986	986	992	985	280
175°	1012	1008	1008	1015	1006	96
180°	1012	1012	1012	1012	1012	

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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°	9.6	36.2	61.9	79.7	84.8
92.5°	18.3	32.6	58.4	75.7	79.3
95°	47.5	36.9	56.4	73.3	78.2
97.5°	85.0	114.8	54.2	69.7	74.7
100°	129.2	154.7	68.0	67.5	71.5
102.5°	179.1	198.3	224.7	66.3	70.0
105°	232.0	245.6	266.4	284.6	261.0
107.5°	281.2	291.2	312.5	327.7	334.0
110°	330.7	339.4	359.8	371.9	377.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	378.7	388.7	405.3	414.6	421.3
115°	428.1	434.6	448.5	460.0	463.2
117.5°	472.8	478.6	494.6	503.5	507.1
120°	517.8	522.3	534.7	545.3	547.5
122.5°	560.2	561.7	575.6	585.5	587.2
125°	599.8	602.5	612.4	623.3	626.8
127.5°	638.5	638.8	651.7	659.1	661.6
130°	675.1	675.4	685.0	693.9	696.7
132.5°	709.2	710.2	718.8	727.3	729.3
135°	742.8	742.0	748.3	757.1	761.4
137.5°	773.1	772.7	778.2	786.6	788.1
140°	802.6	803.7	805.6	813.9	816.8
142.5°	828.7	831.7	832.0	838.5	840.4
145°	855.9	857.7	857.7	861.2	864.6
147.5°	877.1	881.2	880.4	881.7	884.2
150°	900.6	903.1	902.4	902.4	903.1
152.5°	919.8	922.1	920.5	922.1	921.3
155°	937.9	938.7	936.4	939.5	937.2
157.5°	953.8	953.8	950.8	954.6	950.8
160°	967.5	965.2	964.4	969.0	964.4
162.5°	979.6	976.6	975.8	980.3	975.0
165°	989.4	985.6	985.6	991.7	984.9
167.5°	997.8	994.0	993.2	1000.0	992.5
170°	1004.6	1000.0	1000.8	1006.8	999.3
172.5°	1009.1	1004.6	1005.3	1011.4	1003.1
175°	1012.1	1007.6	1008.4	1015.2	1006.1
177.5°	1014.4	1009.1	1010.6	1016.7	1007.6
180°	1012.1	1012.1	1012.1	1012.1	1012.1

(END OF REPORT)