

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: P1001396

Luminaire Tested: SA4XXDIP-B350D810UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001396
REPORT IS A COMBINATION OF REPORTS P996015 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-D4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

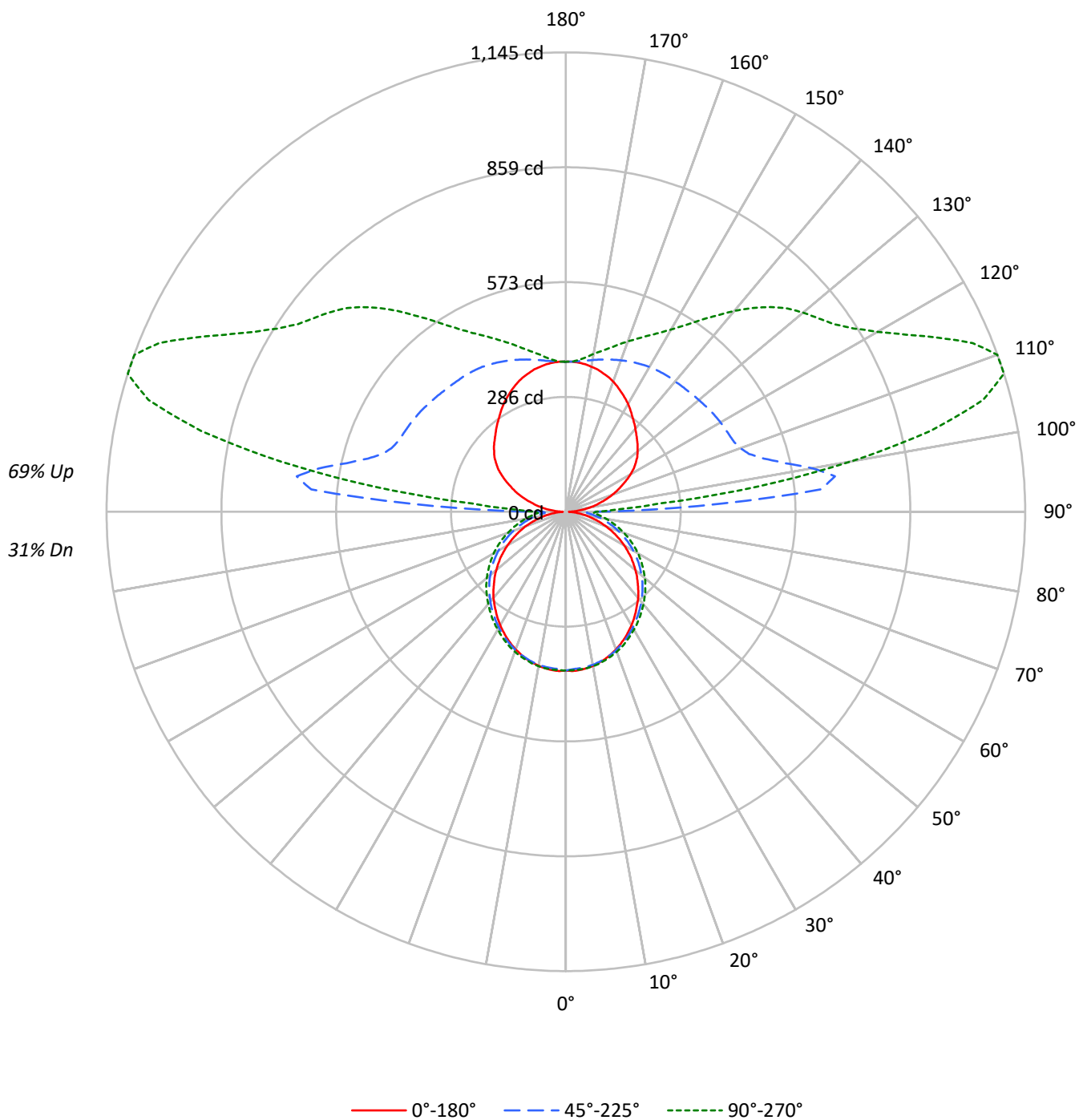
Lumens per Lamp: N/A
Luminaire Lumens: 4078.4 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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

TEST NUMBER: P1001396

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



TEST NUMBER: P1001396

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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31		
1	93	88	84	81	83	79	76	73	63	60	58	47	46	44	33	32	31	25		
2	84	77	71	65	75	69	64	59	54	51	48	41	38	36	29	27	26	20		
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	22	17		
4	70	59	51	45	62	53	47	41	42	37	33	32	28	26	22	20	18	14		
5	64	53	44	39	57	47	40	35	38	32	29	28	25	22	20	18	16	12		
6	59	47	39	33	52	42	35	30	34	29	25	26	22	19	18	16	14	11		
7	54	42	34	29	48	38	31	26	30	25	22	23	20	17	16	14	12	9		
8	50	38	30	25	45	34	28	23	28	23	19	21	17	15	15	13	11	8		
9	47	35	27	22	42	31	25	20	25	20	17	19	16	13	14	11	10	7		
10	43	32	25	20	39	29	22	18	23	18	15	18	14	12	13	10	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3227	3227	3227
5°	3235	3143	3148
10°	3214	3081	3072
15°	3184	3011	2986
20°	3140	2936	2902
25°	3090	2853	2812
30°	3035	2770	2720
35°	2974	2686	2638
40°	2925	2605	2554
45°	2851	2530	2478
50°	2789	2444	2399
55°	2725	2361	2308
60°	2625	2258	2222
65°	2516	2147	2119
70°	2383	2020	2000
75°	2196	1878	1887
80°	1987	1734	1769
85°	1710	1589	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2851 cd/sqm

TEST NUMBER: P1001396

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	0.9
10°-20°	107.4	2.6
20°-30°	162.4	4.0
30°-40°	196.5	4.8
40°-50°	207.7	5.1
50°-60°	195.5	4.8
60°-70°	162.2	4.0
70°-80°	113.8	2.8
80°-90°	65.6	1.6
90°-100°	315.9	7.7
100°-110°	593.0	14.5
110°-120°	522.4	12.8
120°-130°	433.5	10.6
130°-140°	357.5	8.8
140°-150°	270.4	6.6
150°-160°	189.4	4.6
160°-170°	111.4	2.7
170°-180°	36.2	0.9
0°-30°	307.3	7.5
0°-40°	503.8	12.4
0°-60°	907.0	22.2
0°-90°	1248.7	30.6
90°-120°	1431.3	35.1
90°-150°	2492.6	61.1
90°-180°	2830.0	69.4
0°-180°	4078.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	396	395	392	395	395	38
15°	380	380	379	383	382	107
25°	347	350	351	356	357	160
35°	304	309	314	320	321	190
45°	253	262	270	278	280	196
55°	198	208	221	230	233	177
65°	137	152	167	178	181	136
75°	76	93	111	124	128	81
85°	24	42	62	75	80	24
90°	8	31	57	71	76	6
95°	30	97	637	347	234	31
105°	90	137	511	1078	1077	96
115°	154	196	450	856	1026	153
125°	213	252	440	723	815	190
135°	251	299	428	635	722	194
145°	289	330	422	528	582	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	

TEST NUMBER: P1001396

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	395.7	395.7	395.7	395.7	395.7
2.5°	397.4	396.1	392.6	395.7	395.2
5°	396.1	394.8	391.7	395.2	394.8
7.5°	393.5	392.6	389.9	393.9	393.5
10°	389.9	389.5	387.3	391.2	390.8
12.5°	385.0	385.0	383.7	387.3	387.3
15°	379.7	380.2	378.8	382.8	382.4
17.5°	372.6	374.0	373.5	377.5	377.1
20°	365.1	366.4	366.9	371.3	371.3
22.5°	356.7	358.5	359.3	363.8	364.7
25°	347.4	350.0	351.4	356.2	356.7
27.5°	337.2	341.2	342.9	347.4	347.8
30°	327.0	330.5	333.6	338.5	339.4
32.5°	315.9	320.3	323.9	329.7	330.5
35°	304.0	309.3	313.7	319.9	321.2
37.5°	292.0	298.2	303.5	309.7	311.0
40°	280.5	286.2	292.4	299.1	300.9
42.5°	267.2	273.8	281.4	288.9	290.2
45°	253.4	261.9	270.3	277.8	280.0
47.5°	240.6	249.0	258.8	266.3	268.9
50°	226.4	236.2	245.9	254.8	257.4
52.5°	212.2	222.0	233.5	242.4	245.0
55°	198.5	207.8	221.1	230.0	232.6
57.5°	183.0	194.5	207.4	218.0	220.2
60°	167.9	179.4	194.1	204.3	207.8
62.5°	153.3	166.2	180.8	191.0	194.5
65°	137.4	151.5	166.6	177.7	181.2
67.5°	122.3	137.4	153.3	164.4	167.9
70°	106.8	121.8	138.7	150.6	153.7
72.5°	91.7	107.2	125.4	136.9	140.5
75°	76.2	92.6	111.2	123.6	127.6
77.5°	61.6	78.9	98.4	110.8	115.2
80°	48.3	66.0	85.5	98.8	102.4
82.5°	35.0	53.6	73.1	86.8	90.8
85°	23.5	42.1	62.0	75.3	79.8
87.5°	14.6	32.8	52.3	65.1	69.1
90°	7.8	30.7	57.1	71.4	75.7
92.5°	16.9	78.8	329.1	148.7	124.0
95°	30.0	96.8	637.0	346.8	233.7
97.5°	45.7	102.6	676.7	653.0	482.2
100°	60.7	111.8	624.2	882.8	722.1
102.5°	75.4	123.3	559.5	1025.6	931.4
105°	89.9	137.2	511.0	1077.6	1077.2
107.5°	106.8	152.2	478.7	1059.0	1145.0
110°	123.2	166.5	463.0	997.4	1144.3

TEST NUMBER: P1001396

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.0	181.4	454.1	922.9	1098.2
115°	154.0	196.5	450.4	856.0	1025.9
117.5°	170.1	210.9	447.5	802.6	955.4
120°	185.8	224.6	445.3	766.0	896.9
122.5°	200.5	238.3	442.4	741.2	850.1
125°	212.6	251.7	439.8	723.2	815.2
127.5°	224.3	265.0	436.1	705.6	792.4
130°	233.4	277.4	433.2	685.4	772.1
132.5°	242.9	288.4	430.7	661.8	750.1
135°	251.3	299.0	427.7	634.6	721.7
137.5°	260.1	307.8	425.9	606.0	688.9
140°	269.7	316.2	423.9	577.9	653.7
142.5°	279.5	323.9	423.0	552.4	616.1
145°	289.0	330.5	421.5	528.5	582.4
147.5°	300.0	337.0	419.3	508.2	550.8
150°	310.3	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)