

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: P1001395

Luminaire Tested: SA4XXDIP-B350D810UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001395
REPORT IS A COMBINATION OF REPORTS P996014 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-D1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

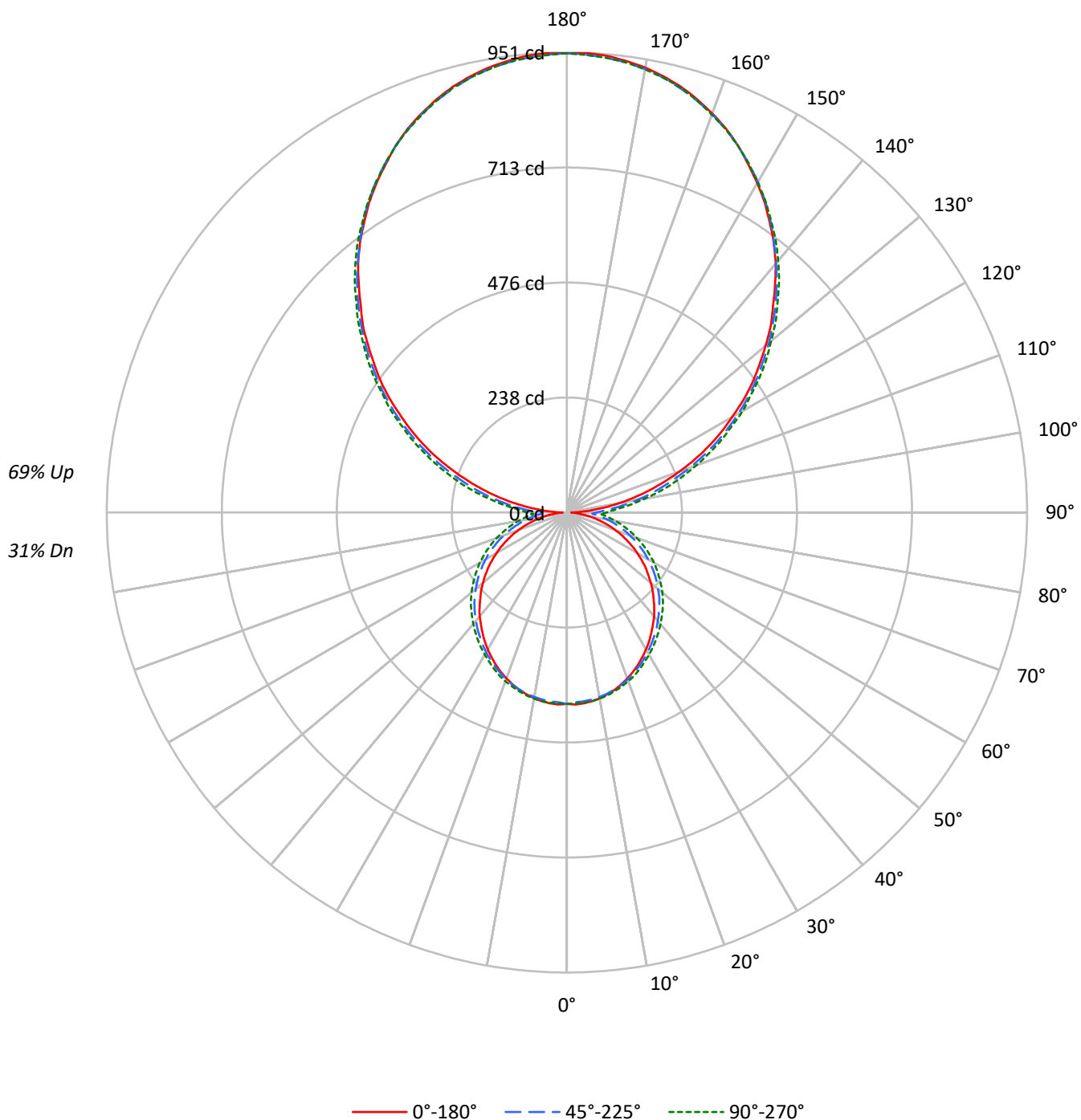
Lumens per Lamp: N/A
Luminaire Lumens: 3985.0 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	39	39	39
1	93	88	84	81	83	80	76	73	63	61	58	48	46	45	33	32	32
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	27	26
3	77	67	60	54	69	61	54	49	48	43	40	36	33	31	25	24	22
4	70	59	51	45	63	53	47	41	42	37	34	32	29	26	23	20	19
5	64	53	45	39	57	47	40	35	38	33	29	29	25	22	20	18	16
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	31	25	21	25	20	17	19	16	13	14	12	10
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	11	9

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: 90°
Luminance: 3033 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	0.9
10°-20°	107.4	2.7
20°-30°	162.4	4.1
30°-40°	196.5	4.9
40°-50°	207.7	5.2
50°-60°	195.5	4.9
60°-70°	162.2	4.1
70°-80°	113.8	2.9
80°-90°	66.2	1.7
90°-100°	100.1	2.5
100°-110°	213.6	5.4
110°-120°	333.8	8.4
120°-130°	425.9	10.7
130°-140°	471.0	11.8
140°-150°	459.3	11.5
150°-160°	385.5	9.7
160°-170°	256.5	6.4
170°-180°	89.8	2.3
0°-30°	307.3	7.7
0°-40°	503.8	12.6
0°-60°	907.0	22.8
0°-90°	1249.3	31.4
90°-120°	647.6	16.2
90°-150°	2003.8	50.3
90°-180°	2736.0	68.7
0°-180°	3985.0	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°	9	35	60	77	82	8
95°	50	71	94	108	112	52
105°	175	185	204	217	223	186
115°	323	327	339	348	351	319
125°	468	468	478	485	486	417
135°	602	607	610	615	616	466
145°	731	734	734	736	736	458
155°	837	837	836	839	836	385
165°	911	909	908	912	909	257
175°	948	944	943	949	943	90
180°	949	949	949	949	949	

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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°	9.3	35.1	60.1	77.3	82.3
92.5°	25.7	50.8	73.5	88.1	92.4
95°	49.9	71.1	94.3	108.5	112.5
97.5°	75.8	94.6	118.5	133.1	137.0
100°	107.7	122.1	146.0	159.4	162.5
102.5°	141.5	151.9	174.7	188.4	192.6
105°	175.1	184.6	203.9	217.2	223.0
107.5°	211.0	219.3	235.5	249.5	251.9
110°	247.3	254.9	269.8	278.4	284.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	285.0	290.3	303.5	313.3	316.8
115°	322.8	326.7	339.4	348.5	350.9
117.5°	358.8	361.4	373.9	381.0	382.4
120°	394.3	398.5	409.2	414.4	419.4
122.5°	431.7	432.4	443.7	450.3	449.7
125°	468.0	467.5	477.9	484.8	486.0
127.5°	501.0	502.8	510.2	516.7	519.1
130°	535.8	537.6	544.7	551.2	550.9
132.5°	571.8	572.8	577.4	583.4	585.4
135°	602.2	606.6	609.7	615.3	615.7
137.5°	636.7	638.4	641.7	646.2	649.1
140°	671.2	672.2	672.7	677.6	679.2
142.5°	702.3	703.8	702.6	707.5	709.2
145°	730.9	733.5	734.2	736.2	735.7
147.5°	760.3	763.6	762.8	762.5	763.6
150°	786.7	789.3	789.3	789.3	788.5
152.5°	811.3	812.7	813.5	815.7	813.5
155°	837.0	837.0	836.2	839.2	836.2
157.5°	859.0	857.5	857.5	859.7	857.5
160°	878.1	877.4	876.6	878.8	875.2
162.5°	895.7	893.5	892.8	897.2	893.5
165°	911.1	908.9	907.5	911.9	908.9
167.5°	923.6	920.7	920.7	925.1	920.7
170°	933.9	930.2	930.9	935.4	930.2
172.5°	941.2	938.3	938.3	943.4	938.3
175°	947.8	944.2	943.4	948.6	943.4
177.5°	950.8	947.1	947.1	952.2	946.4
180°	949.3	949.3	949.3	949.3	949.3

(END OF REPORT)