

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: P1001394

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001394
REPORT IS A COMBINATION OF REPORTS P996013 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-D
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

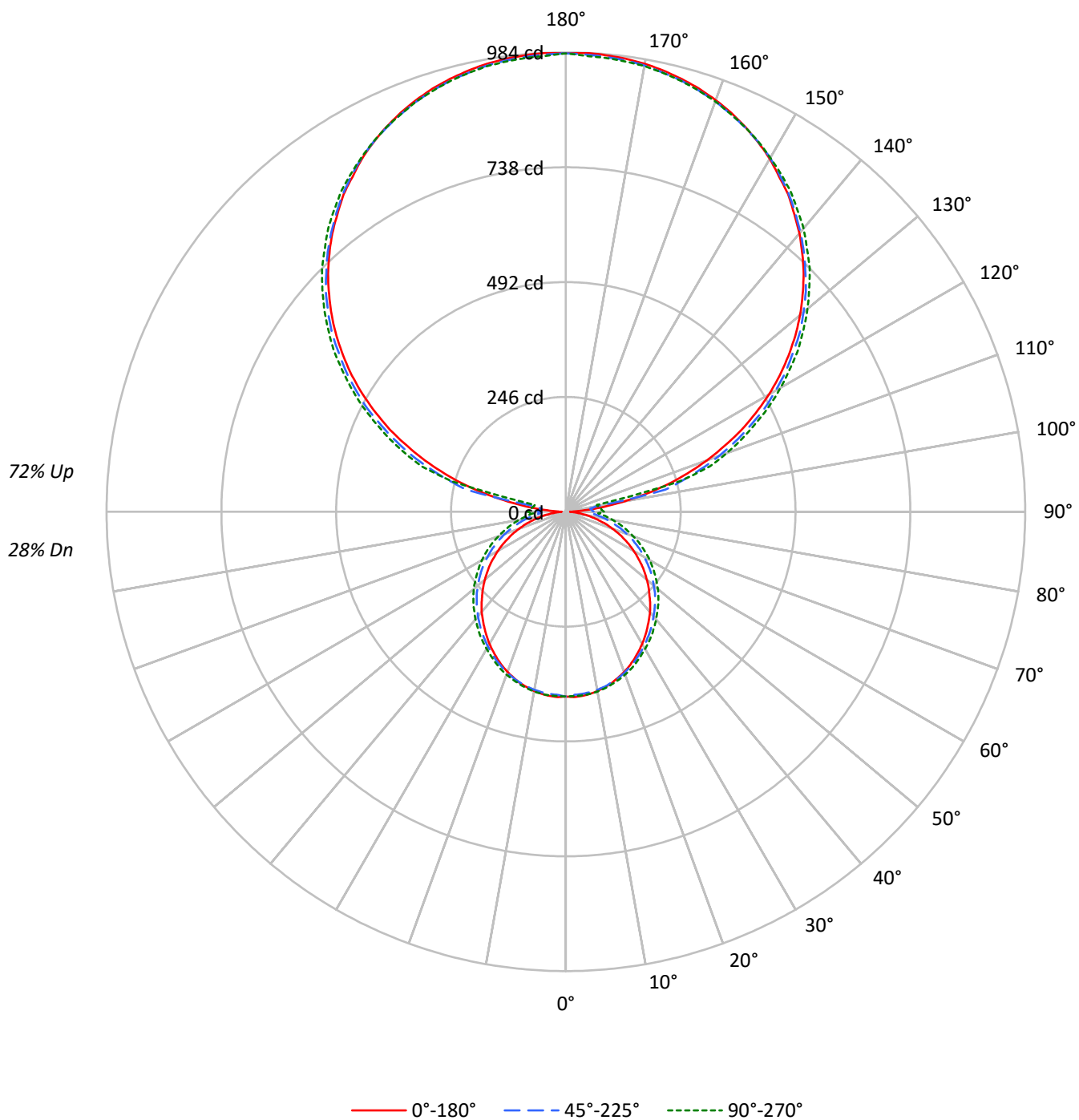
Lumens per Lamp: N/A
Luminaire Lumens: 4389.0 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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	2.4
20°-30°	162.4	3.7
30°-40°	196.5	4.5
40°-50°	207.7	4.7
50°-60°	195.5	4.5
60°-70°	162.2	3.7
70°-80°	113.8	2.6
80°-90°	66.2	1.5
90°-100°	70.8	1.6
100°-110°	242.9	5.5
110°-120°	428.8	9.8
120°-130°	531.0	12.1
130°-140°	561.2	12.8
140°-150°	521.3	11.9
150°-160°	419.7	9.6
160°-170°	270.7	6.2
170°-180°	93.3	2.1
0°-30°	307.3	7.0
0°-40°	503.8	11.5
0°-60°	907.0	20.7
0°-90°	1249.3	28.5
90°-120°	742.5	16.9
90°-150°	2356.0	53.7
90°-180°	3140.0	71.5
0°-180°	4389.0	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	7
95°	46	36	55	71	76	54
105°	225	238	258	276	253	236
115°	415	422	435	446	449	409
125°	582	584	594	605	608	520
135°	720	720	726	734	738	555
145°	830	832	832	835	839	519
155°	910	911	908	911	909	420
165°	960	956	956	962	955	271
175°	982	977	978	985	976	93
180°	982	982	982	982	982	

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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°	17.6	31.7	56.6	73.4	77.0
95°	46.2	35.8	54.7	71.1	75.8
97.5°	82.4	111.5	52.5	67.7	72.4
100°	125.3	150.0	66.0	65.4	69.3
102.5°	173.8	192.3	218.0	64.3	67.8
105°	225.0	238.2	258.3	276.0	253.2
107.5°	272.8	282.5	303.1	317.9	323.9
110°	320.7	329.1	349.1	360.7	366.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	367.3	377.0	393.1	402.2	408.6
115°	415.4	421.5	435.0	446.2	449.3
117.5°	458.7	464.2	479.8	488.3	491.9
120°	502.3	506.5	518.7	529.0	531.1
122.5°	543.4	544.9	558.3	567.9	569.5
125°	581.9	584.3	594.0	604.6	608.0
127.5°	619.4	619.6	632.2	639.4	641.8
130°	654.8	655.2	664.5	673.2	675.8
132.5°	687.9	689.0	697.2	705.4	707.4
135°	720.5	719.8	725.8	734.4	738.5
137.5°	749.9	749.4	754.9	763.0	764.5
140°	778.5	779.5	781.5	789.4	792.4
142.5°	803.7	806.7	807.0	813.4	815.1
145°	830.2	832.0	832.0	835.4	838.6
147.5°	850.7	854.7	854.0	855.1	857.7
150°	873.5	876.0	875.3	875.3	876.0
152.5°	892.2	894.4	892.9	894.4	893.7
155°	909.8	910.6	908.3	911.3	909.1
157.5°	925.2	925.2	922.3	926.0	922.3
160°	938.5	936.3	935.5	939.9	935.5
162.5°	950.2	947.3	946.5	950.9	945.8
165°	959.8	956.1	956.1	962.0	955.3
167.5°	967.8	964.2	963.4	970.0	962.7
170°	974.4	970.0	970.8	976.6	969.3
172.5°	978.8	974.4	975.2	981.0	973.0
175°	981.8	977.4	978.1	984.7	975.9
177.5°	984.0	978.8	980.3	986.2	977.4
180°	981.8	981.8	981.8	981.8	981.8

(END OF REPORT)