

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: P1001346

Luminaire Tested: SA4XXDIP-B350D810UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001346
REPORT IS A COMBINATION OF REPORTS P995965 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D810UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

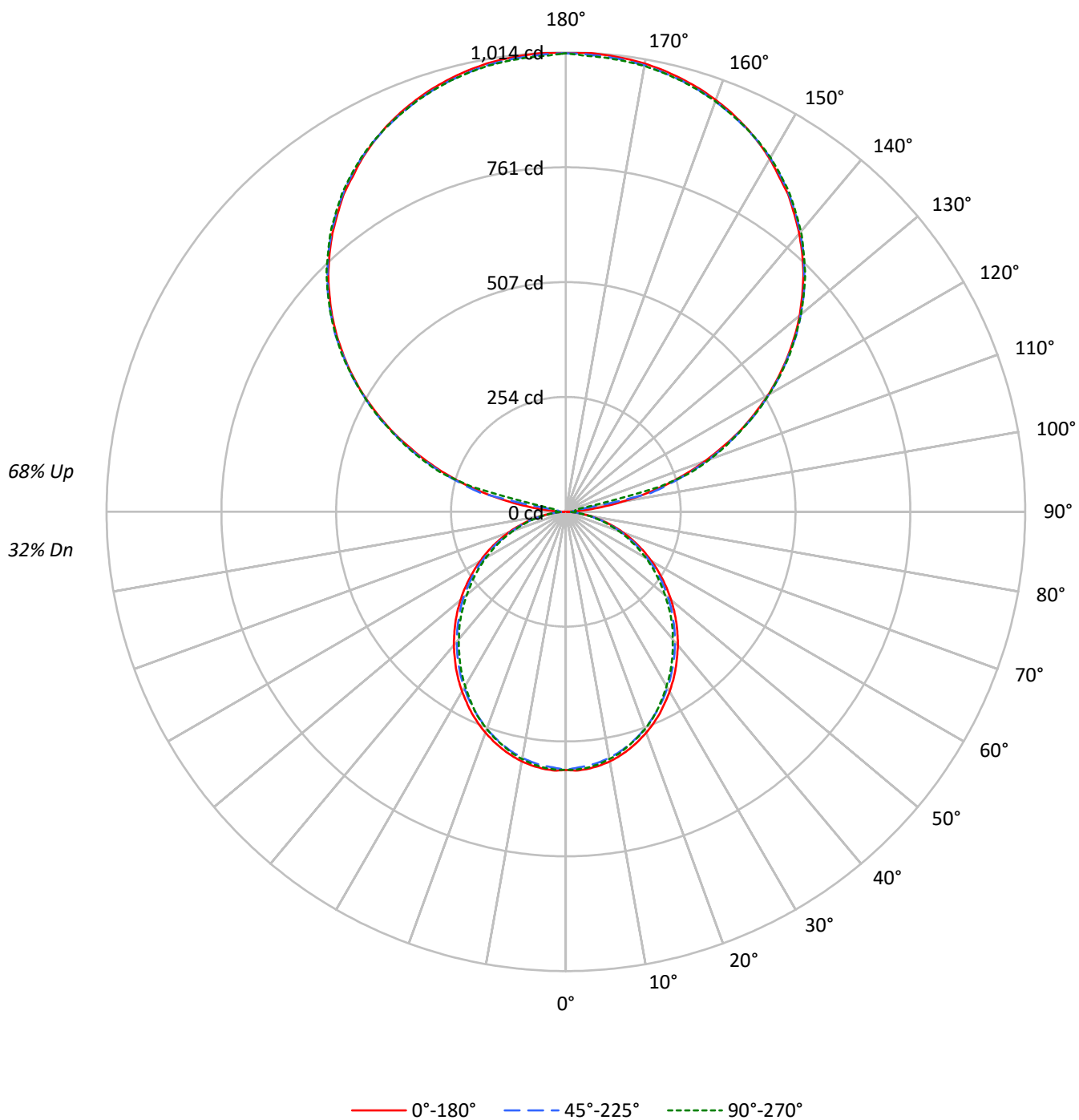
Lumens per Lamp: N/A
Luminaire Lumens: 4597.0 lumens
Efficiency: N/A
Efficacy: 134.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	93	93	93	93	73	73	73	56	56	56	39	39	39
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33
2	85	78	72	67	76	70	65	61	56	53	50	43	41	38	31	29	28
3	78	69	61	56	70	62	56	51	49	45	42	38	35	33	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	23	19	16	17	14	12
9	48	36	28	24	43	33	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4648	4648	4648
5°	4652	4514	4520
10°	4612	4389	4359
15°	4546	4240	4176
20°	4461	4079	3988
25°	4367	3909	3784
30°	4252	3724	3561
35°	4134	3536	3346
40°	4010	3333	3116
45°	3879	3129	2902
50°	3736	2932	2665
55°	3580	2702	2429
60°	3420	2450	2184
65°	3238	2189	1907
70°	3025	1876	1611
75°	2712	1511	1289
80°	2311	1093	907
85°	1797	607	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3879 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	1.2
10°-20°	151.4	3.3
20°-30°	222.8	4.8
30°-40°	258.9	5.6
40°-50°	258.9	5.6
50°-60°	226.5	4.9
60°-70°	168.1	3.7
70°-80°	95.4	2.1
80°-90°	29.4	0.6
90°-100°	33.6	0.7
100°-110°	221.3	4.8
110°-120°	422.5	9.2
120°-130°	536.4	11.7
130°-140°	573.8	12.5
140°-150°	536.5	11.7
150°-160°	432.7	9.4
160°-170°	279.0	6.1
170°-180°	96.2	2.1
0°-30°	427.8	9.3
0°-40°	686.8	14.9
0°-60°	1172.2	25.5
0°-90°	1465.1	31.9
90°-120°	677.4	14.7
90°-150°	2324.0	50.6
90°-180°	3132.0	68.1
0°-180°	4597.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	568	563	568	567	54
15°	542	540	534	536	535	153
25°	491	488	481	482	480	226
35°	422	419	413	410	407	264
45°	345	342	334	329	328	266
55°	261	259	253	248	245	234
65°	177	174	170	165	163	175
75°	94	92	90	88	87	100
85°	25	25	24	24	23	27
90°	2	11	17	21	23	4
95°	42	16	17	21	22	51
105°	228	232	236	243	216	238
115°	425	428	427	428	428	419
125°	598	601	600	602	603	534
135°	742	741	744	746	747	572
145°	855	858	858	858	860	535
155°	938	939	936	940	937	432
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°	570.0	570.0	570.0	570.0	570.0
2.5°	571.8	570.5	565.4	570.0	569.5
5°	569.5	567.7	562.7	567.7	566.8
7.5°	565.4	563.6	558.1	562.2	561.8
10°	559.5	557.7	551.7	555.4	554.5
12.5°	551.7	549.9	543.5	547.6	546.2
15°	542.1	540.3	533.5	536.2	534.8
17.5°	531.2	528.9	522.5	524.3	523.4
20°	518.8	516.6	509.7	511.1	510.2
22.5°	505.6	502.4	495.5	498.3	496.5
25°	491.0	487.8	481.4	481.8	480.0
27.5°	474.5	471.3	465.4	464.5	462.2
30°	458.1	454.4	448.5	446.7	444.4
32.5°	440.7	437.5	431.1	428.9	426.6
35°	422.5	419.3	412.9	409.7	407.4
37.5°	403.3	400.5	393.7	390.5	387.3
40°	384.6	380.9	374.1	369.5	367.2
42.5°	364.5	362.6	354.9	349.4	348.0
45°	344.8	341.6	334.3	329.3	327.9
47.5°	324.3	322.0	315.1	309.7	306.0
50°	303.3	301.4	295.0	288.7	285.9
52.5°	282.7	280.4	273.6	268.1	264.4
55°	260.8	259.4	253.0	247.5	244.8
57.5°	240.2	238.9	232.5	227.0	224.3
60°	218.8	216.5	210.6	206.4	204.2
62.5°	197.8	195.9	189.5	185.9	183.6
65°	176.8	174.5	169.9	165.3	163.1
67.5°	155.3	153.5	148.9	144.3	143.9
70°	135.6	132.5	128.8	125.1	123.8
72.5°	114.6	111.4	108.7	106.0	104.6
75°	94.1	91.8	89.5	87.7	87.2
77.5°	74.0	73.1	70.8	70.3	69.0
80°	56.2	54.8	53.9	53.0	52.5
82.5°	38.8	38.4	38.4	37.9	37.5
85°	24.7	24.7	23.7	23.7	23.3
87.5°	11.9	11.4	11.0	11.0	11.0
90°	2.3	10.6	16.7	21.2	22.7
92.5°	11.4	9.8	15.9	20.4	20.4
95°	41.6	15.9	16.7	21.2	22.0
97.5°	79.5	96.1	16.7	20.4	21.2
100°	124.2	137.8	33.3	20.4	21.2
102.5°	174.1	183.2	192.3	22.0	22.0
105°	227.9	232.4	236.2	243.0	215.8
107.5°	277.1	279.3	284.6	288.4	291.5
110°	327.0	329.3	333.8	335.4	337.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	375.5	380.0	381.5	380.8	383.8
115°	425.4	427.7	427.0	428.5	428.5
117.5°	470.1	473.1	475.4	474.7	474.7
120°	515.5	518.6	517.8	519.3	517.8
122.5°	557.9	559.4	561.0	561.7	560.2
125°	598.0	601.1	599.6	601.8	602.6
127.5°	636.7	637.4	641.2	640.4	639.7
130°	673.7	674.5	676.8	677.5	677.5
132.5°	707.8	709.3	712.4	713.1	712.4
135°	741.9	741.1	744.2	745.7	747.2
137.5°	772.2	772.2	775.9	777.5	776.7
140°	801.7	803.2	804.7	807.0	807.7
142.5°	828.2	831.2	832.0	833.5	833.5
145°	855.4	857.7	857.7	858.5	860.0
147.5°	876.6	881.2	880.4	881.2	881.9
150°	900.1	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)