

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: P1001368

Luminaire Tested: SA4XXDIP-B350D810UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001368
REPORT IS A COMBINATION OF REPORTS P995987 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D810UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

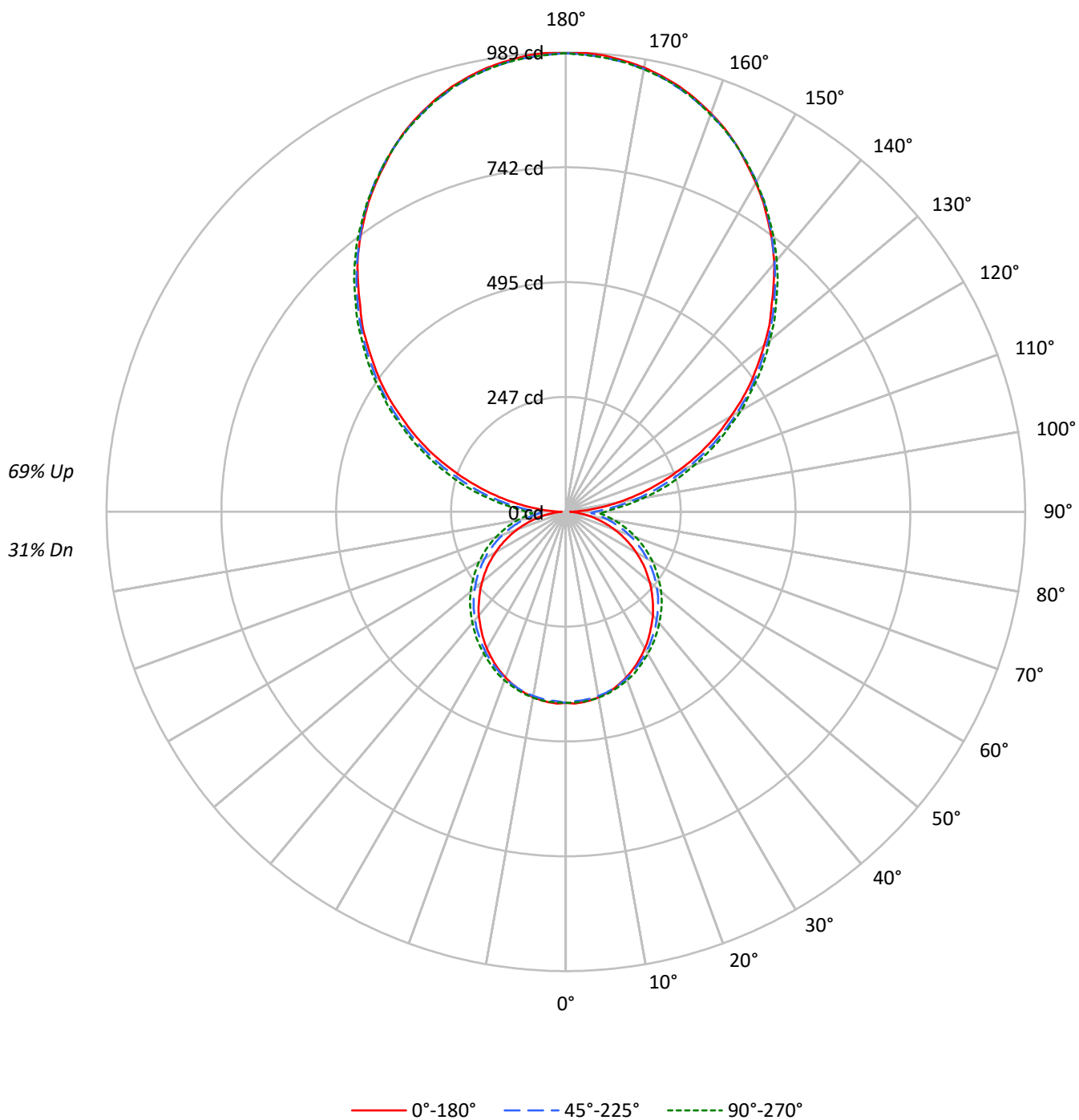
Lumens per Lamp: N/A
Luminaire Lumens: 4144.0 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	3356	3356	3356
5°	3365	3268	3274
10°	3343	3204	3194
15°	3312	3132	3105
20°	3265	3054	3018
25°	3213	2967	2925
30°	3157	2881	2829
35°	3093	2794	2744
40°	3041	2710	2656
45°	2966	2631	2577
50°	2901	2542	2495
55°	2833	2455	2400
60°	2729	2348	2311
65°	2617	2233	2205
70°	2479	2100	2080
75°	2285	1954	1962
80°	2065	1803	1838
85°	1776	1653	1738

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3164 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	0.9
10°-20°	111.7	2.7
20°-30°	168.9	4.1
30°-40°	204.4	4.9
40°-50°	216.0	5.2
50°-60°	203.3	4.9
60°-70°	168.7	4.1
70°-80°	118.4	2.9
80°-90°	68.9	1.7
90°-100°	104.1	2.5
100°-110°	222.2	5.4
110°-120°	347.2	8.4
120°-130°	442.9	10.7
130°-140°	489.8	11.8
140°-150°	477.6	11.5
150°-160°	400.9	9.7
160°-170°	266.7	6.4
170°-180°	93.4	2.3
0°-30°	319.6	7.7
0°-40°	524.0	12.6
0°-60°	943.3	22.8
0°-90°	1299.3	31.4
90°-120°	673.4	16.3
90°-150°	2083.7	50.3
90°-180°	2845.0	68.7
0°-180°	4144.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	412	411	407	411	411	39
15°	395	395	394	398	398	111
25°	361	364	365	370	371	166
35°	316	322	326	333	334	198
45°	264	272	281	289	291	204
55°	206	216	230	239	242	184
65°	143	158	173	185	188	142
75°	79	96	116	129	133	84
85°	24	44	64	78	83	25
90°	10	36	62	80	86	8
95°	52	74	98	113	117	54
105°	182	192	212	226	232	193
115°	336	340	353	362	365	331
125°	487	486	497	504	505	434
135°	626	631	634	640	640	485
145°	760	763	763	766	765	476
155°	870	870	870	873	870	401
165°	947	945	944	948	945	267
175°	986	982	981	986	981	94
180°	987	987	987	987	987	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	411.5	411.5	411.5	411.5	411.5
2.5°	413.4	412.0	408.3	411.5	411.0
5°	412.0	410.6	407.4	411.0	410.6
7.5°	409.2	408.3	405.5	409.7	409.2
10°	405.5	405.1	402.8	406.9	406.4
12.5°	400.4	400.4	399.1	402.8	402.8
15°	394.9	395.4	394.0	398.1	397.7
17.5°	387.5	388.9	388.5	392.6	392.2
20°	379.7	381.1	381.6	386.2	386.2
22.5°	371.0	372.8	373.7	378.3	379.3
25°	361.3	364.0	365.4	370.5	371.0
27.5°	350.7	354.8	356.7	361.3	361.7
30°	340.1	343.8	347.0	352.1	353.0
32.5°	328.6	333.2	336.9	342.8	343.8
35°	316.1	321.6	326.3	332.7	334.1
37.5°	303.7	310.1	315.7	322.1	323.5
40°	291.7	297.7	304.1	311.1	312.9
42.5°	277.9	284.8	292.6	300.5	301.8
45°	263.6	272.3	281.1	288.9	291.2
47.5°	250.2	259.0	269.1	277.0	279.7
50°	235.5	245.6	255.8	265.0	267.7
52.5°	220.7	230.9	242.8	252.1	254.8
55°	206.4	216.1	229.9	239.2	241.9
57.5°	190.3	202.3	215.7	226.7	229.0
60°	174.6	186.6	201.8	212.4	216.1
62.5°	159.4	172.8	188.0	198.6	202.3
65°	142.9	157.6	173.3	184.8	188.5
67.5°	127.2	142.9	159.4	171.0	174.6
70°	111.1	126.7	144.2	156.7	159.9
72.5°	95.4	111.5	130.4	142.4	146.1
75°	79.3	96.3	115.7	128.6	132.7
77.5°	64.1	82.0	102.3	115.2	119.8
80°	50.2	68.7	88.9	102.8	106.4
82.5°	36.4	55.8	76.0	90.3	94.5
85°	24.4	43.8	64.5	78.3	82.9
87.5°	15.2	34.1	54.4	67.7	71.9
90°	9.7	36.5	62.4	80.4	85.6
92.5°	26.7	52.8	76.5	91.7	96.0
95°	51.8	73.9	98.1	112.8	117.0
97.5°	78.8	98.3	123.3	138.4	142.5
100°	112.0	127.0	151.8	165.8	169.0
102.5°	147.1	158.0	181.6	195.9	200.3
105°	182.0	192.0	212.1	225.9	231.9
107.5°	219.4	228.1	244.9	259.5	262.0
110°	257.2	265.1	280.5	289.6	295.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	296.4	302.0	315.6	325.7	329.4
115°	335.7	339.8	353.0	362.4	364.8
117.5°	373.1	375.8	388.9	396.2	397.6
120°	410.0	414.4	425.5	430.9	436.1
122.5°	448.9	449.7	461.3	468.3	467.7
125°	486.6	486.2	496.9	504.2	505.4
127.5°	520.9	522.8	530.5	537.3	539.7
130°	557.2	559.0	566.4	573.1	572.9
132.5°	594.6	595.6	600.5	606.7	608.8
135°	626.2	630.7	633.9	639.8	640.3
137.5°	662.0	663.9	667.2	671.9	674.9
140°	697.9	699.0	699.4	704.7	706.2
142.5°	730.3	731.9	730.6	735.7	737.5
145°	760.1	762.7	763.4	765.5	765.0
147.5°	790.7	794.0	793.2	792.9	794.0
150°	818.1	820.7	820.7	820.7	819.9
152.5°	843.6	845.1	845.9	848.2	845.9
155°	870.3	870.3	869.5	872.6	869.5
157.5°	893.2	891.7	891.7	894.0	891.7
160°	913.1	912.3	911.5	913.8	910.0
162.5°	931.4	929.1	928.3	932.9	929.1
165°	947.4	945.1	943.6	948.2	945.1
167.5°	960.4	957.3	957.3	961.9	957.3
170°	971.1	967.3	968.0	972.6	967.3
172.5°	978.7	975.7	975.7	981.0	975.7
175°	985.6	981.8	981.0	986.4	981.0
177.5°	988.6	984.8	984.8	990.2	984.1
180°	987.1	987.1	987.1	987.1	987.1

(END OF REPORT)