

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: P1001308

Luminaire Tested: SA4XXDIP-B350D590UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001308
REPORT IS A COMBINATION OF REPORTS P995927 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D590UB30-4F0-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

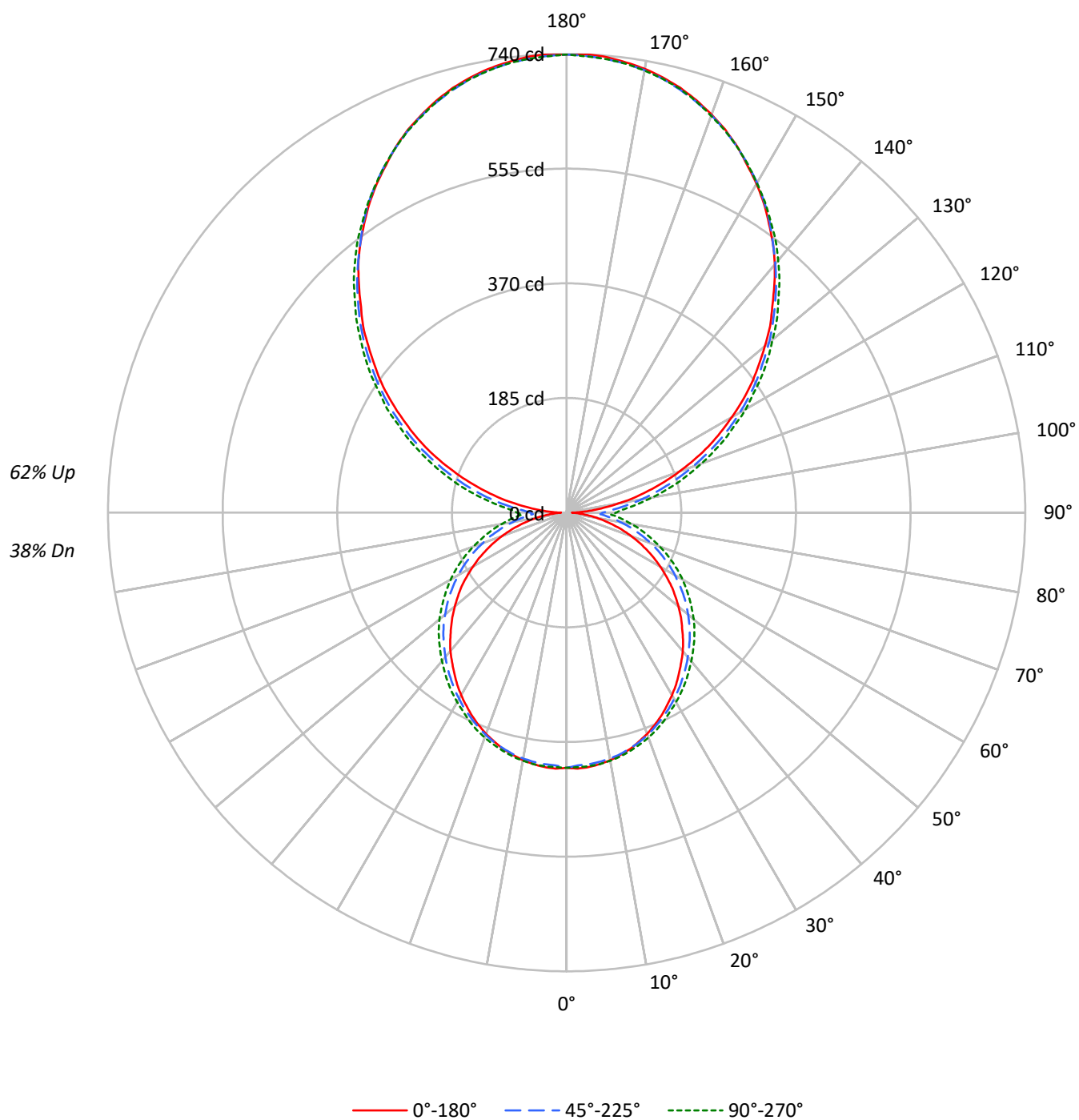
Lumens per Lamp: N/A
Luminaire Lumens: 3455.0 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 28.4
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	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45
1	94	90	86	82	85	81	78	75	66	63	61	51	50	48	38	37	36
2	85	78	71	66	77	71	65	61	57	53	50	45	42	40	33	31	30
3	78	68	61	55	70	62	55	50	50	45	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21
5	65	53	45	39	59	48	41	36	39	34	30	31	27	24	23	21	18
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	27	23	25	21	18	19	16	14
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	15	13
9	47	35	28	23	43	32	26	21	27	21	18	21	17	15	16	13	11
10	44	32	25	20	40	30	23	19	24	19	16	20	16	13	15	12	10

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: 2968 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	1.1
10°-20°	111.7	3.2
20°-30°	168.9	4.9
30°-40°	204.4	5.9
40°-50°	216.0	6.3
50°-60°	203.3	5.9
60°-70°	168.7	4.9
70°-80°	118.4	3.4
80°-90°	68.3	2.0
90°-100°	87.9	2.5
100°-110°	173.7	5.0
110°-120°	264.9	7.7
120°-130°	334.4	9.7
130°-140°	367.9	10.6
140°-150°	357.8	10.4
150°-160°	300.1	8.7
160°-170°	199.7	5.8
170°-180°	69.9	2.0
0°-30°	319.6	9.3
0°-40°	524.0	15.2
0°-60°	943.3	27.3
0°-90°	1298.8	37.6
90°-120°	526.5	15.2
90°-150°	1586.5	45.9
90°-180°	2156.0	62.4
0°-180°	3455.0	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°	9	34	58	75	80	8
95°	40	61	84	98	102	42
105°	137	147	166	180	185	146
115°	252	256	270	279	282	249
125°	365	364	375	383	384	325
135°	469	472	476	482	483	363
145°	569	571	572	574	574	356
155°	652	652	651	653	651	300
165°	709	708	706	710	708	200
175°	738	735	734	738	734	70
180°	739	739	739	739	739	

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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°	9.1	33.8	58.2	75.0	79.8
92.5°	21.8	45.3	68.0	82.7	86.8
95°	40.3	60.6	83.5	97.7	101.9
97.5°	60.4	78.3	101.8	116.1	120.2
100°	85.1	99.4	122.4	136.1	139.3
102.5°	111.4	122.1	144.1	157.9	162.1
105°	137.3	147.1	166.4	179.6	185.1
107.5°	165.3	173.7	190.4	204.2	206.9
110°	193.4	201.0	216.6	226.1	231.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.7	228.3	242.3	252.4	256.1
115°	252.0	256.1	269.7	279.3	281.9
117.5°	280.0	282.7	296.0	303.9	305.9
120°	307.5	311.2	322.9	329.2	334.1
122.5°	336.6	337.2	349.0	356.6	357.0
125°	364.7	364.3	375.2	382.9	384.5
127.5°	390.4	391.8	399.8	407.0	409.6
130°	417.5	418.7	426.1	433.2	433.8
132.5°	445.5	446.1	451.2	457.8	460.0
135°	469.0	472.4	475.6	481.9	483.0
137.5°	495.8	497.2	500.1	505.3	508.2
140°	522.7	523.4	523.8	529.3	531.0
142.5°	546.9	548.0	547.0	552.1	553.9
145°	569.2	571.0	571.5	573.8	573.8
147.5°	592.0	594.4	593.8	593.7	595.0
150°	612.6	614.4	614.4	614.4	613.8
152.5°	631.5	632.7	633.3	635.0	633.3
155°	651.5	651.5	651.0	653.3	651.0
157.5°	668.7	667.5	667.5	669.3	667.5
160°	683.5	683.0	682.4	684.1	681.3
162.5°	697.3	695.6	695.0	698.4	695.6
165°	709.3	707.6	706.4	709.8	707.6
167.5°	719.0	716.7	716.7	720.1	716.7
170°	727.0	724.1	724.7	728.1	724.1
172.5°	732.7	730.4	730.4	734.4	730.4
175°	737.8	735.0	734.4	738.4	734.4
177.5°	740.1	737.3	737.3	741.3	736.7
180°	739.0	739.0	739.0	739.0	739.0

(END OF REPORT)