

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: P1001307

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001307
REPORT IS A COMBINATION OF REPORTS P995926 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-D
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

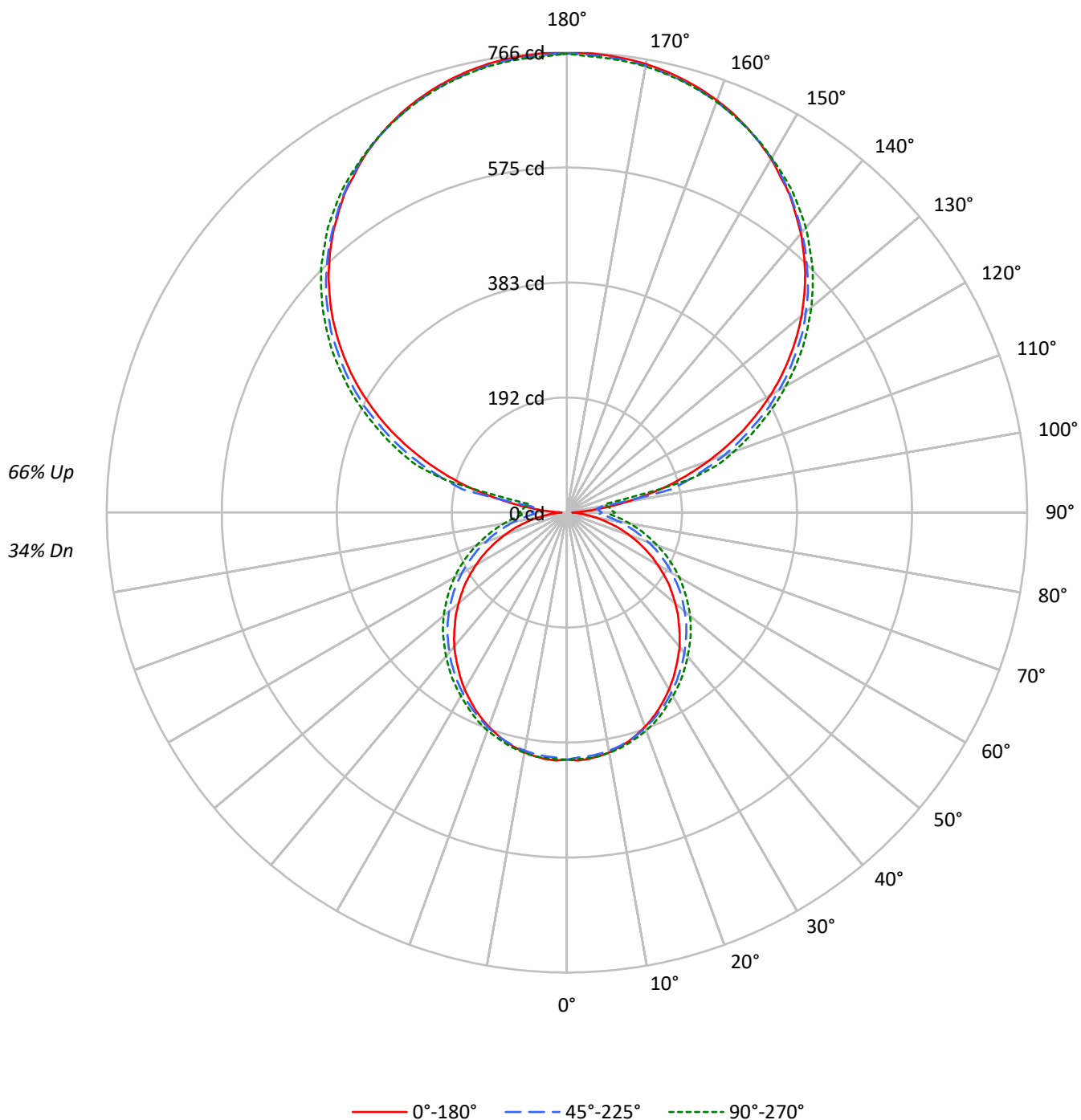
Lumens per Lamp: N/A
Luminaire Lumens: 3769.0 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42
1	94	89	85	81	84	80	77	74	64	62	60	50	48	46	36	35	34
2	85	77	71	66	76	70	65	60	56	52	49	43	40	38	31	29	28
3	77	68	60	54	69	61	55	50	49	44	41	38	35	32	27	25	23
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	24	22	20
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13
8	51	38	31	26	46	35	28	24	28	23	20	22	18	16	16	14	12
9	47	35	28	23	42	32	25	21	26	21	17	20	17	14	15	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	11	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	1.0
10°-20°	111.7	3.0
20°-30°	168.9	4.5
30°-40°	204.4	5.4
40°-50°	216.0	5.7
50°-60°	203.3	5.4
60°-70°	168.7	4.5
70°-80°	118.4	3.1
80°-90°	68.3	1.8
90°-100°	65.1	1.7
100°-110°	196.5	5.2
110°-120°	338.7	9.0
120°-130°	416.0	11.0
130°-140°	438.0	11.6
140°-150°	406.0	10.8
150°-160°	326.6	8.7
160°-170°	210.7	5.6
170°-180°	72.6	1.9
0°-30°	319.6	8.5
0°-40°	524.0	13.9
0°-60°	943.3	25.0
0°-90°	1298.8	34.5
90°-120°	600.3	15.9
90°-150°	1860.3	49.4
90°-180°	2470.0	65.5
0°-180°	3769.0	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	7
95°	37	33	53	68	73	44
105°	176	189	209	225	208	185
115°	324	330	344	355	358	319
125°	453	455	466	476	479	405
135°	561	560	566	574	578	432
145°	646	648	648	651	654	404
155°	708	709	707	709	708	327
165°	747	744	744	749	744	211
175°	764	761	761	766	760	73
180°	764	764	764	764	764	

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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°	15.5	30.4	54.9	71.2	74.8
95°	37.4	33.2	52.7	68.5	73.3
97.5°	65.5	91.5	50.4	65.2	69.9
100°	98.8	121.1	60.1	62.9	66.7
102.5°	136.5	153.5	177.9	61.3	65.0
105°	176.1	188.9	208.7	225.4	208.5
107.5°	213.3	222.9	243.0	257.3	262.9
110°	250.6	258.7	278.3	290.1	295.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.7	295.7	312.0	321.6	327.6
115°	324.0	329.8	344.0	355.3	358.5
117.5°	357.7	362.7	378.3	387.3	391.0
120°	391.5	395.2	408.0	418.4	420.9
122.5°	423.5	424.6	438.2	448.1	450.1
125°	453.3	455.2	465.5	476.1	479.3
127.5°	482.4	482.6	494.7	502.4	505.0
130°	510.0	510.1	519.2	528.1	530.9
132.5°	535.8	536.4	544.3	552.7	554.9
135°	561.0	560.4	565.9	574.4	578.4
137.5°	583.8	583.4	588.1	596.1	597.9
140°	606.1	606.9	608.4	616.1	619.0
142.5°	625.7	628.0	628.1	634.3	636.1
145°	646.3	647.5	647.5	650.9	653.8
147.5°	662.3	665.2	664.7	665.7	668.1
150°	680.0	681.8	681.2	681.2	681.8
152.5°	694.4	696.1	695.0	696.1	695.5
155°	708.1	708.7	707.0	709.2	707.5
157.5°	720.1	720.1	717.8	720.7	717.8
160°	730.4	728.7	728.1	731.5	728.1
162.5°	739.5	737.2	736.7	740.1	736.1
165°	747.0	744.1	744.1	748.7	743.5
167.5°	753.3	750.4	749.8	755.0	749.2
170°	758.4	755.0	755.5	760.1	754.4
172.5°	761.8	758.4	759.0	763.5	757.3
175°	764.1	760.7	761.3	766.4	759.5
177.5°	765.8	761.8	763.0	767.5	760.7
180°	764.1	764.1	764.1	764.1	764.1

(END OF REPORT)