

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: P1025410

Luminaire Tested: S124DIP-B350D590UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025410
REPORT IS A COMBINATION OF REPORTS P995935 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D590UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

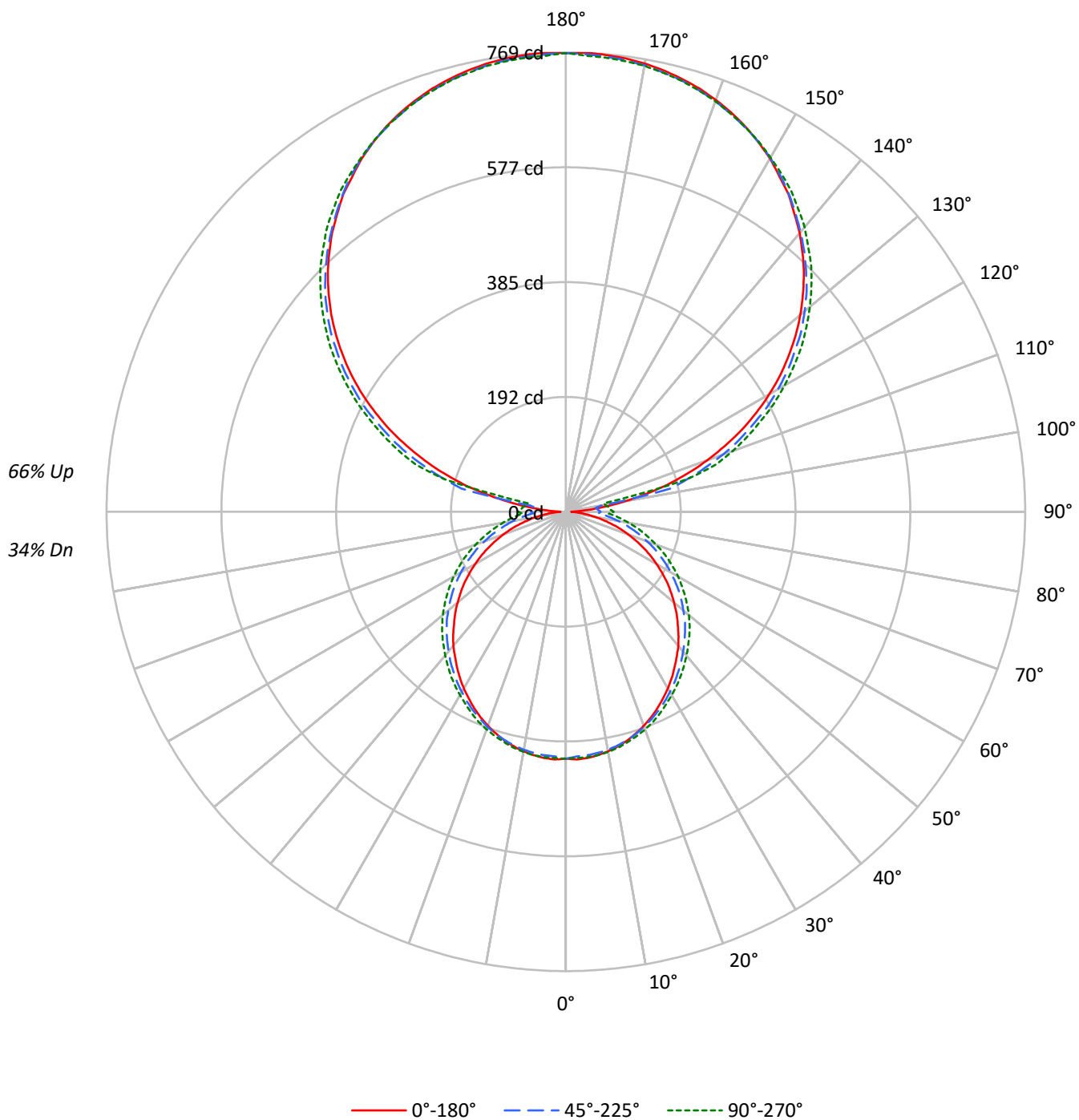
Lumens per Lamp: N/A
Luminaire Lumens: 3786.0 lumens
Efficiency: N/A
Efficacy: 133.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1025410

CATALOG NUMBER: S124DIP-B350D590UB35-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1025410

CATALOG NUMBER: S124DIP-B350D590UB35-4F0-XX-W2A-D

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	12	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°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2978 cd/sqm

TEST NUMBER: P1025410

CATALOG NUMBER: S124DIP-B350D590UB35-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	1.0
10°-20°	112.2	3.0
20°-30°	169.6	4.5
30°-40°	205.2	5.4
40°-50°	217.0	5.7
50°-60°	204.2	5.4
60°-70°	169.4	4.5
70°-80°	118.9	3.1
80°-90°	68.6	1.8
90°-100°	65.4	1.7
100°-110°	197.4	5.2
110°-120°	340.3	9.0
120°-130°	418.0	11.0
130°-140°	440.0	11.6
140°-150°	407.9	10.8
150°-160°	328.2	8.7
160°-170°	211.6	5.6
170°-180°	72.9	1.9
0°-30°	321.0	8.5
0°-40°	526.2	13.9
0°-60°	947.4	25.0
0°-90°	1304.3	34.5
90°-120°	603.1	15.9
90°-150°	1869.0	49.4
90°-180°	2482.0	65.6
0°-180°	3786.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	9	34	58	75	80	7
95°	38	33	53	69	74	44
105°	177	190	210	226	209	186
115°	326	331	346	357	360	321
125°	456	457	468	478	482	407
135°	564	563	569	577	581	434
145°	649	650	650	654	657	406
155°	711	712	710	712	711	328
165°	750	748	748	752	747	212
175°	768	764	765	770	763	73
180°	768	768	768	768	768	

TEST NUMBER: P1025410

CATALOG NUMBER: S124DIP-B350D590UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	9.1	33.9	58.4	75.3	80.1
92.5°	15.5	30.6	55.1	71.5	75.2
95°	37.6	33.4	52.9	68.9	73.6
97.5°	65.9	91.9	50.5	65.5	70.2
100°	99.3	121.6	60.5	63.2	67.0
102.5°	137.2	154.2	178.7	61.6	65.3
105°	177.0	189.7	209.6	226.4	209.4
107.5°	214.3	223.9	244.1	258.6	264.1
110°	251.7	260.0	279.6	291.4	296.8

TEST NUMBER: P1025410

CATALOG NUMBER: S124DIP-B350D590UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.0	297.0	313.5	323.0	329.0
115°	325.5	331.3	345.6	356.9	360.2
117.5°	359.4	364.5	380.0	389.2	392.9
120°	393.3	397.0	409.8	420.3	422.8
122.5°	425.5	426.6	440.3	450.1	452.2
125°	455.5	457.3	467.7	478.3	481.5
127.5°	484.8	484.8	496.9	504.7	507.4
130°	512.4	512.5	521.6	530.6	533.3
132.5°	538.2	538.9	546.8	555.2	557.4
135°	563.6	563.0	568.6	577.2	581.0
137.5°	586.6	586.2	590.8	599.0	600.7
140°	608.9	609.7	611.2	619.0	621.9
142.5°	628.6	630.9	631.0	637.3	639.1
145°	649.3	650.5	650.5	653.9	656.9
147.5°	665.4	668.3	667.8	668.8	671.2
150°	683.2	685.0	684.4	684.4	685.0
152.5°	697.6	699.3	698.2	699.3	698.8
155°	711.4	712.0	710.2	712.5	710.8
157.5°	723.5	723.5	721.2	724.0	721.2
160°	733.8	732.1	731.5	734.9	731.5
162.5°	743.0	740.7	740.1	743.5	739.5
165°	750.4	747.6	747.6	752.2	747.0
167.5°	756.8	753.9	753.3	758.5	752.7
170°	761.9	758.5	759.0	763.6	757.9
172.5°	765.4	761.9	762.5	767.1	760.8
175°	767.7	764.2	764.8	770.0	763.1
177.5°	769.4	765.4	766.5	771.1	764.2
180°	767.7	767.7	767.7	767.7	767.7

(END OF REPORT)