

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: P1025430

Luminaire Tested: S124DIP-B350D590UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025430
REPORT IS A COMBINATION OF REPORTS P995955 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D590UB50-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

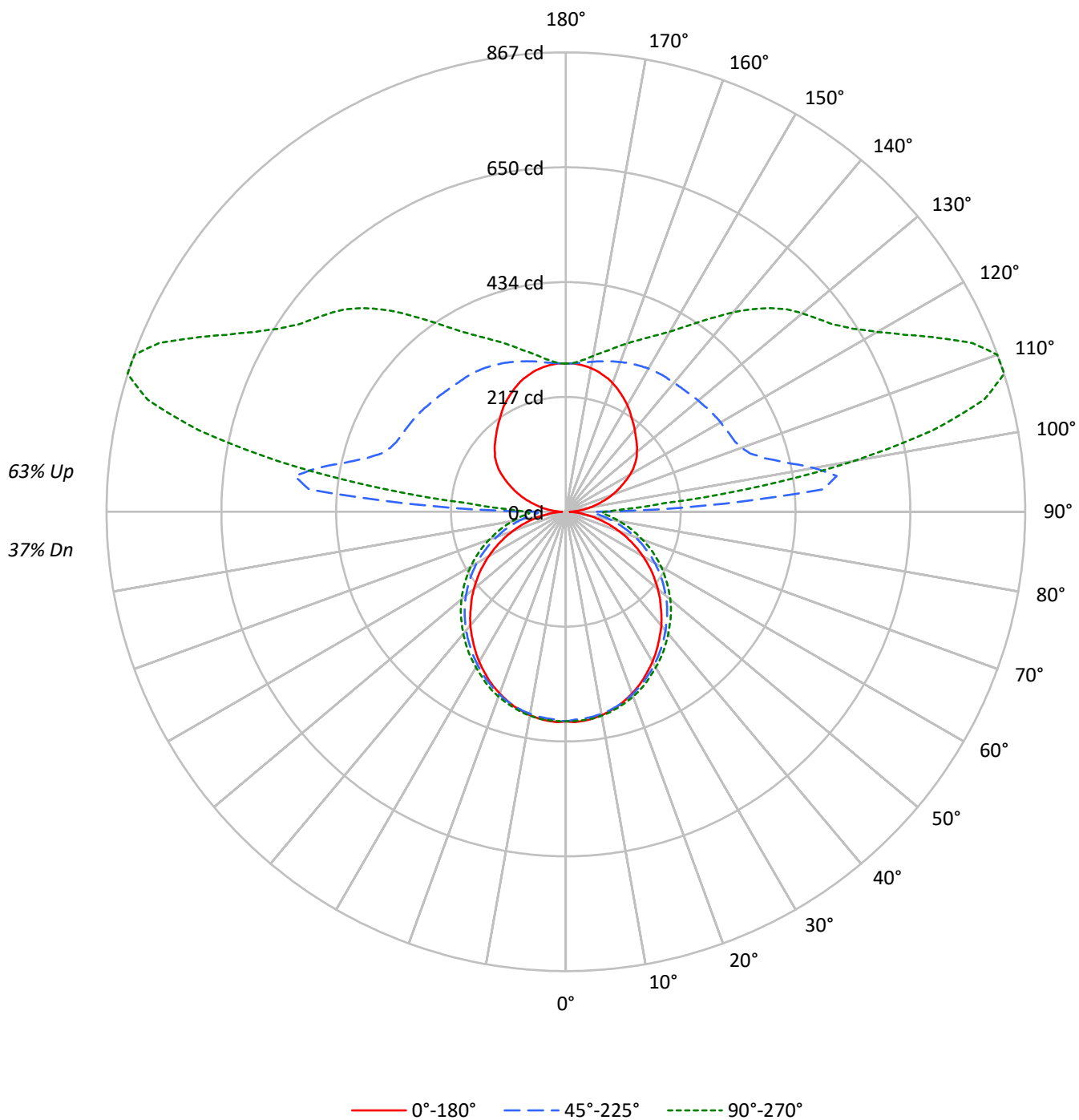
Lumens per Lamp: N/A
Luminaire Lumens: 3392.0 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1025430

CATALOG NUMBER: S124DIP-B350D590UB50-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



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CATALOG NUMBER: S124DIP-B350D590UB50-4F0-XX-W2A-D4

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	94	94	94	94	76	76	76	59	59	59	44	44	44
1	94	90	85	82	85	81	78	75	65	63	61	51	49	48	38	37	36
2	85	78	71	66	77	70	65	60	57	53	50	44	42	39	33	31	29
3	78	68	61	55	70	62	55	50	50	45	41	39	36	33	29	27	25
4	71	60	52	46	64	54	48	42	44	39	35	34	31	28	25	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	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	26	23	25	21	18	19	16	14
8	51	39	31	26	46	35	28	24	29	24	20	23	19	16	17	14	12
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	16	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3227	3227	3227
5°	3235	3143	3148
10°	3214	3081	3072
15°	3184	3011	2986
20°	3140	2936	2902
25°	3090	2853	2812
30°	3035	2770	2720
35°	2974	2686	2638
40°	2925	2605	2554
45°	2851	2530	2478
50°	2789	2444	2399
55°	2725	2361	2308
60°	2625	2258	2222
65°	2516	2147	2119
70°	2383	2020	2000
75°	2196	1878	1887
80°	1987	1734	1769
85°	1710	1589	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2851 cd/sqm

TEST NUMBER: P1025430

CATALOG NUMBER: S124DIP-B350D590UB50-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	1.1
10°-20°	107.4	3.2
20°-30°	162.4	4.8
30°-40°	196.5	5.8
40°-50°	207.7	6.1
50°-60°	195.5	5.8
60°-70°	162.2	4.8
70°-80°	113.8	3.4
80°-90°	65.2	1.9
90°-100°	246.1	7.3
100°-110°	451.0	13.3
110°-120°	395.8	11.7
120°-130°	327.2	9.6
130°-140°	268.7	7.9
140°-150°	202.6	6.0
150°-160°	141.8	4.2
160°-170°	83.4	2.5
170°-180°	27.1	0.8
0°-30°	307.3	9.1
0°-40°	503.8	14.9
0°-60°	907.0	26.7
0°-90°	1248.4	36.8
90°-120°	1092.8	32.2
90°-150°	1891.4	55.8
90°-180°	2144.0	63.2
0°-180°	3392.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	396	395	392	395	395	38
15°	380	380	379	383	382	107
25°	347	350	351	356	357	160
35°	304	309	314	320	321	190
45°	253	262	270	278	280	196
55°	198	208	221	230	233	177
65°	137	152	167	178	181	136
75°	76	93	111	124	128	81
85°	24	42	62	75	80	24
90°	8	29	54	68	72	6
95°	24	78	486	272	189	24
105°	68	106	390	817	817	73
115°	116	149	342	648	776	115
125°	160	189	332	547	616	142
135°	188	224	321	478	544	146
145°	216	247	316	396	437	136
155°	246	265	307	347	362	113
165°	268	276	294	311	316	76
175°	279	280	282	286	285	27
180°	280	280	280	280	280	

TEST NUMBER: P1025430

CATALOG NUMBER: S124DIP-B350D590UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	395.7	395.7	395.7	395.7	395.7
2.5°	397.4	396.1	392.6	395.7	395.2
5°	396.1	394.8	391.7	395.2	394.8
7.5°	393.5	392.6	389.9	393.9	393.5
10°	389.9	389.5	387.3	391.2	390.8
12.5°	385.0	385.0	383.7	387.3	387.3
15°	379.7	380.2	378.8	382.8	382.4
17.5°	372.6	374.0	373.5	377.5	377.1
20°	365.1	366.4	366.9	371.3	371.3
22.5°	356.7	358.5	359.3	363.8	364.7
25°	347.4	350.0	351.4	356.2	356.7
27.5°	337.2	341.2	342.9	347.4	347.8
30°	327.0	330.5	333.6	338.5	339.4
32.5°	315.9	320.3	323.9	329.7	330.5
35°	304.0	309.3	313.7	319.9	321.2
37.5°	292.0	298.2	303.5	309.7	311.0
40°	280.5	286.2	292.4	299.1	300.9
42.5°	267.2	273.8	281.4	288.9	290.2
45°	253.4	261.9	270.3	277.8	280.0
47.5°	240.6	249.0	258.8	266.3	268.9
50°	226.4	236.2	245.9	254.8	257.4
52.5°	212.2	222.0	233.5	242.4	245.0
55°	198.5	207.8	221.1	230.0	232.6
57.5°	183.0	194.5	207.4	218.0	220.2
60°	167.9	179.4	194.1	204.3	207.8
62.5°	153.3	166.2	180.8	191.0	194.5
65°	137.4	151.5	166.6	177.7	181.2
67.5°	122.3	137.4	153.3	164.4	167.9
70°	106.8	121.8	138.7	150.6	153.7
72.5°	91.7	107.2	125.4	136.9	140.5
75°	76.2	92.6	111.2	123.6	127.6
77.5°	61.6	78.9	98.4	110.8	115.2
80°	48.3	66.0	85.5	98.8	102.4
82.5°	35.0	53.6	73.1	86.8	90.8
85°	23.5	42.1	62.0	75.3	79.8
87.5°	14.6	32.8	52.3	65.1	69.1
90°	7.6	29.2	53.8	67.7	71.8
92.5°	14.3	64.6	256.7	124.8	107.2
95°	23.9	77.6	486.5	272.3	188.6
97.5°	35.5	81.4	515.7	500.9	373.9
100°	46.7	87.9	475.7	672.2	552.8
102.5°	57.7	95.9	426.7	778.5	708.9
105°	68.3	106.0	389.8	816.8	817.4
107.5°	81.0	116.8	365.1	802.2	867.4
110°	93.1	127.0	352.9	755.6	866.3

TEST NUMBER: P1025430

CATALOG NUMBER: S124DIP-B350D590UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.8	137.8	345.7	699.0	831.2
115°	115.9	148.7	342.4	648.5	776.4
117.5°	128.0	159.2	339.6	607.8	723.0
120°	139.6	169.0	337.4	579.7	678.6
122.5°	150.6	179.0	334.7	560.6	642.9
125°	159.6	188.8	332.3	546.6	616.1
127.5°	168.4	198.6	329.0	532.7	598.5
130°	175.0	207.8	326.3	517.0	582.6
132.5°	182.2	216.1	323.9	498.8	565.6
135°	188.4	224.0	321.2	477.8	543.6
137.5°	195.0	230.4	319.4	455.8	518.5
140°	202.1	236.8	317.5	434.2	491.6
142.5°	209.3	242.6	316.6	414.7	462.9
145°	216.4	247.4	315.5	396.3	437.0
147.5°	224.7	252.3	313.9	380.5	412.8
150°	232.4	257.0	312.2	367.8	392.5
152.5°	239.1	261.4	309.5	357.4	376.0
155°	245.7	265.2	306.7	347.4	362.3
157.5°	252.3	268.8	304.0	338.0	349.6
160°	258.4	271.8	300.7	328.7	338.1
162.5°	263.9	274.3	297.4	319.6	327.1
165°	267.7	276.0	294.1	311.4	316.1
167.5°	272.1	277.4	290.8	304.2	307.3
170°	274.9	278.5	287.5	297.1	299.0
172.5°	277.6	279.2	284.2	290.8	290.8
175°	279.3	279.8	282.0	285.9	284.8
177.5°	280.4	279.8	280.4	282.3	280.4
180°	279.8	279.8	279.8	279.8	279.8

(END OF REPORT)