

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: P1025423

Luminaire Tested: S124DIP-B350D590UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025423
REPORT IS A COMBINATION OF REPORTS P995948 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D590UB40-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

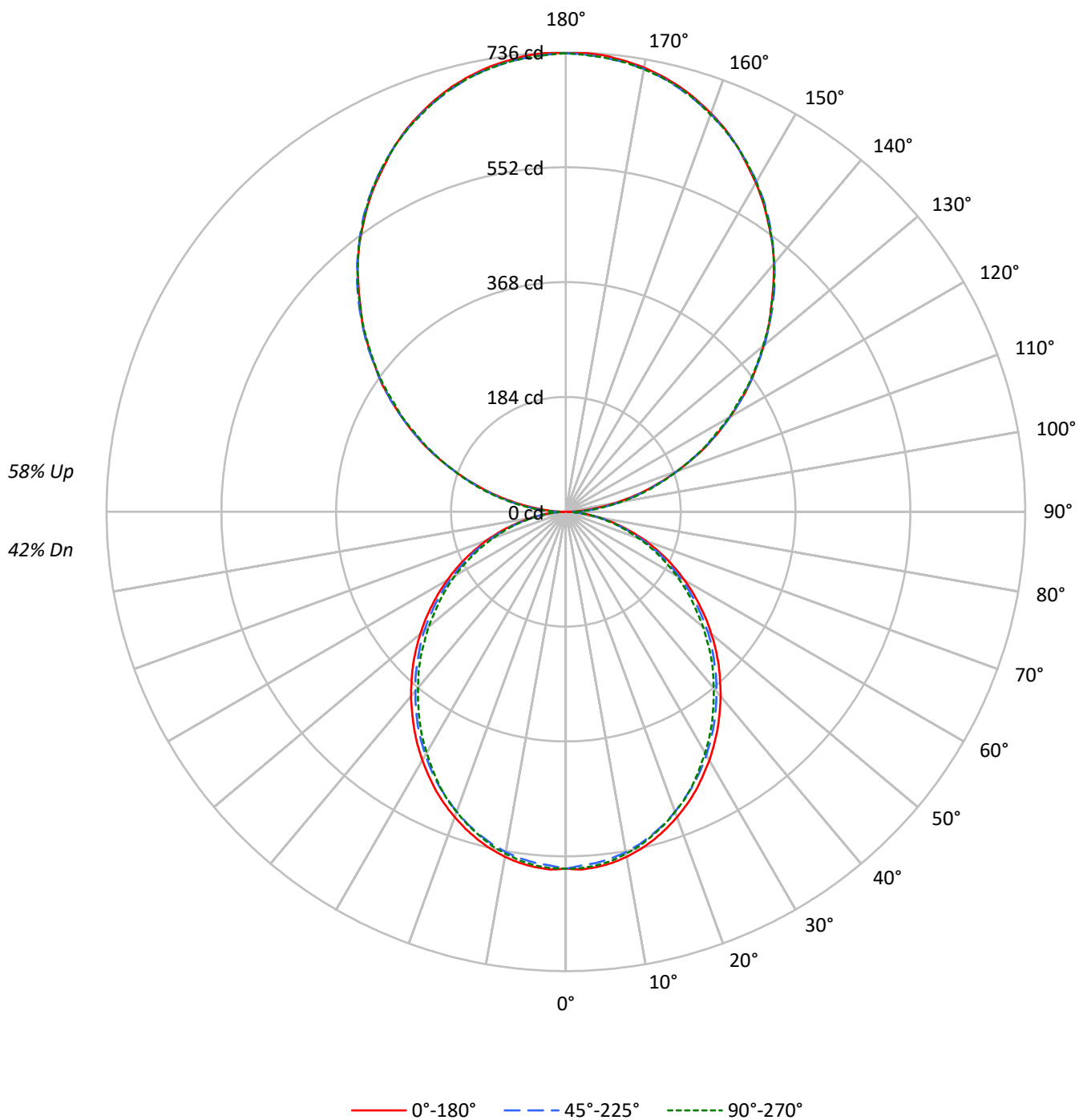
Lumens per Lamp: N/A
Luminaire Lumens: 3508.0 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49
1	96	92	88	84	87	84	80	78	69	67	65	55	54	52	43	42	41
2	87	80	74	69	79	73	68	64	60	57	53	49	46	44	38	36	35
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	33	31	29
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25
5	67	55	47	41	61	51	44	39	42	37	33	34	30	27	27	24	22
6	61	50	42	36	56	46	39	33	38	33	29	31	27	24	24	22	19
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4668	4530	4535
10°	4628	4404	4373
15°	4562	4255	4191
20°	4477	4092	4001
25°	4382	3922	3797
30°	4267	3737	3573
35°	4147	3548	3357
40°	4023	3344	3127
45°	3893	3141	2912
50°	3749	2943	2674
55°	3592	2711	2437
60°	3431	2458	2191
65°	3249	2197	1913
70°	3036	1881	1616
75°	2720	1517	1294
80°	2320	1097	910
85°	1797	610	490

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3893 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	1.5
10°-20°	151.9	4.3
20°-30°	223.5	6.4
30°-40°	259.8	7.4
40°-50°	259.8	7.4
50°-60°	227.2	6.5
60°-70°	168.7	4.8
70°-80°	95.7	2.7
80°-90°	29.0	0.8
90°-100°	47.9	1.4
100°-110°	143.4	4.1
110°-120°	243.7	6.9
120°-130°	321.4	9.2
130°-140°	360.9	10.3
140°-150°	354.8	10.1
150°-160°	298.4	8.5
160°-170°	198.5	5.7
170°-180°	69.5	2.0
0°-30°	429.3	12.2
0°-40°	689.1	19.6
0°-60°	1176.2	33.5
0°-90°	1469.6	41.9
90°-120°	435.0	12.4
90°-150°	1472.0	42.0
90°-180°	2038.0	58.1
0°-180°	3508.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	572	572	572	572	572	
5°	572	570	565	570	569	54
15°	544	542	535	538	537	153
25°	493	490	483	484	482	227
35°	424	421	414	411	409	265
45°	346	343	336	330	329	267
55°	262	260	254	248	246	234
65°	177	175	170	166	164	176
75°	94	92	90	88	88	100
85°	25	25	24	24	23	27
90°	2	8	12	16	17	4
95°	34	39	43	45	45	37
105°	132	133	135	137	139	140
115°	248	248	247	246	246	244
125°	361	361	360	359	358	322
135°	465	469	469	468	466	360
145°	565	568	568	568	566	354
155°	648	648	647	649	647	298
165°	705	703	702	706	703	199
175°	734	731	730	734	730	70
180°	735	735	735	735	735	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	571.9	571.9	571.9	571.9	571.9
2.5°	573.8	572.4	567.4	571.9	571.5
5°	571.5	569.7	564.6	569.7	568.7
7.5°	567.4	565.5	560.0	564.2	563.7
10°	561.4	559.6	553.6	557.3	556.4
12.5°	553.6	551.8	545.4	549.5	548.1
15°	544.0	542.2	535.3	538.0	536.7
17.5°	533.0	530.7	524.3	526.1	525.2
20°	520.6	518.3	511.4	512.8	511.9
22.5°	507.3	504.1	497.2	500.0	498.2
25°	492.7	489.5	483.0	483.5	481.7
27.5°	476.2	473.0	467.0	466.1	463.8
30°	459.7	456.0	450.0	448.2	445.9
32.5°	442.2	439.0	432.6	430.3	428.0
35°	423.9	420.7	414.3	411.1	408.8
37.5°	404.7	401.9	395.0	391.8	388.6
40°	385.9	382.2	375.3	370.8	368.5
42.5°	365.7	363.9	356.1	350.6	349.2
45°	346.0	342.8	335.5	330.4	329.0
47.5°	325.4	323.1	316.2	310.7	307.1
50°	304.3	302.5	296.1	289.6	286.9
52.5°	283.7	281.4	274.5	269.0	265.3
55°	261.7	260.3	253.9	248.4	245.6
57.5°	241.1	239.7	233.3	227.8	225.0
60°	219.5	217.2	211.3	207.1	204.9
62.5°	198.4	196.6	190.2	186.5	184.2
65°	177.4	175.1	170.5	165.9	163.6
67.5°	155.8	154.0	149.4	144.8	144.4
70°	136.1	132.9	129.2	125.6	124.2
72.5°	115.0	111.8	109.1	106.3	104.9
75°	94.4	92.1	89.8	88.0	87.5
77.5°	74.2	73.3	71.0	70.6	69.2
80°	56.4	55.0	54.1	53.2	52.7
82.5°	39.0	38.5	38.5	38.0	37.6
85°	24.7	24.7	23.8	23.8	23.4
87.5°	11.9	11.5	11.0	11.0	11.0
90°	1.7	8.0	12.5	15.9	17.0
92.5°	14.8	22.2	25.0	26.7	27.3
95°	34.1	39.2	43.2	44.9	44.9
97.5°	54.5	59.1	63.6	65.9	65.9
100°	79.5	81.8	86.9	88.1	88.1
102.5°	105.7	106.3	110.8	112.5	113.1
105°	132.4	133.0	135.2	136.9	138.6
107.5°	160.2	160.8	161.4	163.6	163.1
110°	188.6	189.8	189.2	188.1	189.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.2	218.2	217.0	217.0	217.0
115°	247.7	247.7	246.6	246.0	245.5
117.5°	275.6	275.6	275.0	273.3	271.6
120°	303.4	305.7	304.0	301.1	302.3
122.5°	332.4	333.0	332.4	330.7	327.8
125°	360.8	360.8	360.2	359.1	358.0
127.5°	386.4	388.1	386.9	385.8	385.2
130°	413.6	415.3	415.3	414.2	411.9
132.5°	441.5	442.6	442.0	440.9	440.3
135°	465.3	468.8	468.8	467.6	465.9
137.5°	492.1	493.8	494.9	493.2	493.8
140°	518.8	519.9	519.9	519.3	518.8
142.5°	543.2	544.3	543.8	543.8	543.8
145°	565.3	567.6	568.2	567.6	565.9
147.5°	588.1	590.9	590.3	589.8	589.2
150°	608.5	610.8	610.8	610.8	610.2
152.5°	627.8	629.0	629.6	631.3	629.6
155°	647.7	647.7	647.2	649.4	647.2
157.5°	664.8	663.6	663.6	665.3	663.6
160°	679.6	679.0	678.4	680.1	677.3
162.5°	693.2	691.5	690.9	694.3	691.5
165°	705.1	703.4	702.3	705.7	703.4
167.5°	714.8	712.5	712.5	715.9	712.5
170°	722.7	719.9	720.5	723.9	719.9
172.5°	728.4	726.1	726.1	730.1	726.1
175°	733.5	730.7	730.1	734.1	730.1
177.5°	735.8	733.0	733.0	736.9	732.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)