

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: P1025396

Luminaire Tested: S124DIP-B350D590UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025396
REPORT IS A COMBINATION OF REPORTS P995906 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D590UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

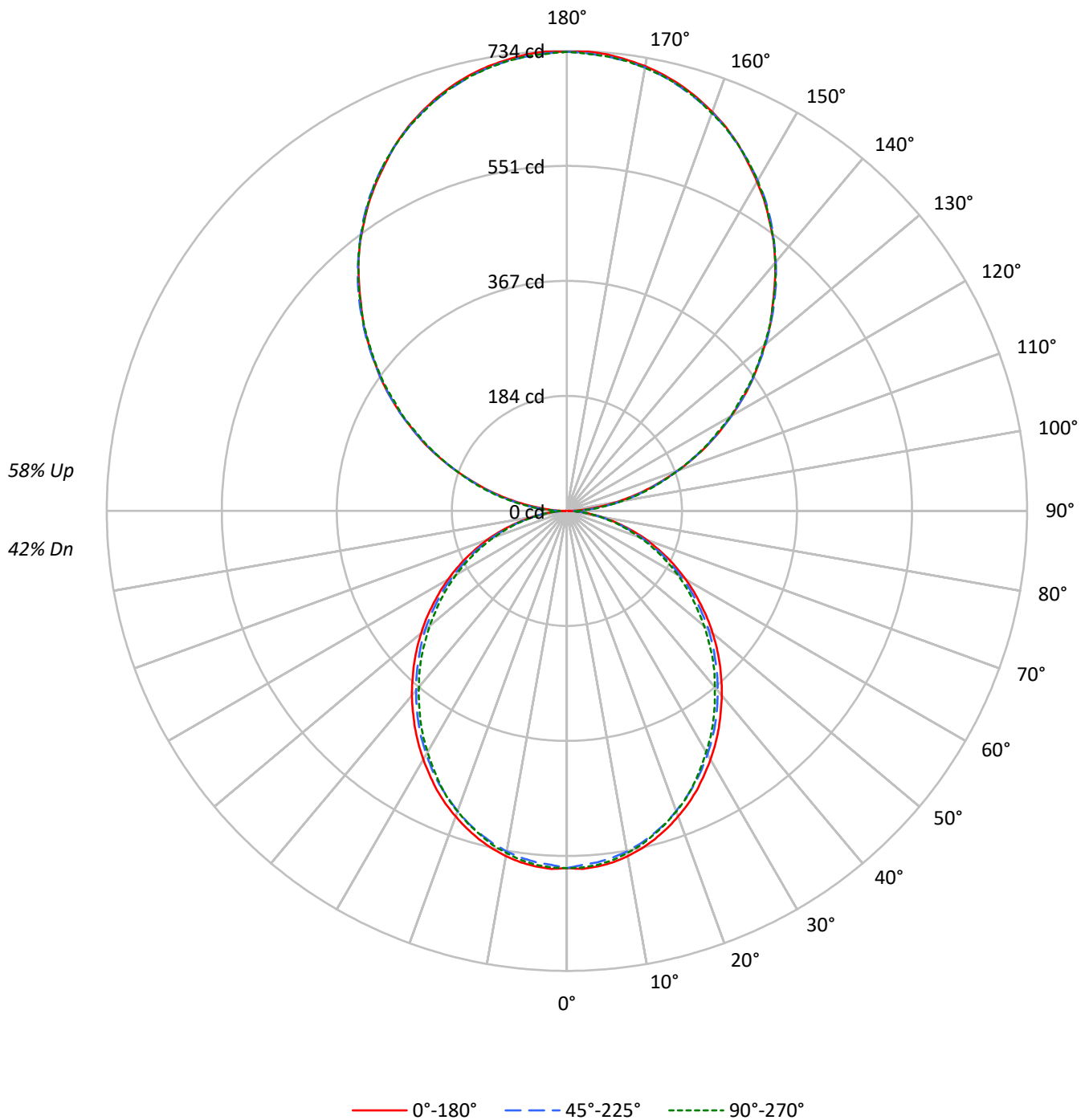
Lumens per Lamp: N/A
Luminaire Lumens: 3497.0 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	4648	4648	4648
5°	4652	4514	4520
10°	4612	4389	4359
15°	4546	4240	4176
20°	4461	4079	3988
25°	4367	3909	3784
30°	4252	3724	3561
35°	4134	3536	3346
40°	4010	3333	3116
45°	3879	3129	2902
50°	3736	2932	2665
55°	3580	2702	2429
60°	3420	2450	2184
65°	3238	2189	1907
70°	3025	1876	1611
75°	2712	1511	1289
80°	2311	1093	907
85°	1797	607	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3879 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	1.5
10°-20°	151.4	4.3
20°-30°	222.8	6.4
30°-40°	258.9	7.4
40°-50°	258.9	7.4
50°-60°	226.5	6.5
60°-70°	168.1	4.8
70°-80°	95.4	2.7
80°-90°	28.9	0.8
90°-100°	47.7	1.4
100°-110°	143.0	4.1
110°-120°	242.9	6.9
120°-130°	320.4	9.2
130°-140°	359.9	10.3
140°-150°	353.7	10.1
150°-160°	297.5	8.5
160°-170°	197.9	5.7
170°-180°	69.3	2.0
0°-30°	427.8	12.2
0°-40°	686.8	19.6
0°-60°	1172.2	33.5
0°-90°	1464.6	41.9
90°-120°	433.7	12.4
90°-150°	1467.7	42.0
90°-180°	2032.0	58.1
0°-180°	3497.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	568	563	568	567	54
15°	542	540	534	536	535	153
25°	491	488	481	482	480	226
35°	422	419	413	410	407	264
45°	345	342	334	329	328	266
55°	261	259	253	248	245	234
65°	177	174	170	165	163	175
75°	94	92	90	88	87	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	136	138	140
115°	247	247	246	245	245	244
125°	360	360	359	358	357	321
135°	464	467	467	466	464	359
145°	564	566	566	566	564	353
155°	646	646	645	648	645	297
165°	703	701	700	704	701	198
175°	731	728	728	732	728	69
180°	732	732	732	732	732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.0	570.0	570.0	570.0	570.0
2.5°	571.8	570.5	565.4	570.0	569.5
5°	569.5	567.7	562.7	567.7	566.8
7.5°	565.4	563.6	558.1	562.2	561.8
10°	559.5	557.7	551.7	555.4	554.5
12.5°	551.7	549.9	543.5	547.6	546.2
15°	542.1	540.3	533.5	536.2	534.8
17.5°	531.2	528.9	522.5	524.3	523.4
20°	518.8	516.6	509.7	511.1	510.2
22.5°	505.6	502.4	495.5	498.3	496.5
25°	491.0	487.8	481.4	481.8	480.0
27.5°	474.5	471.3	465.4	464.5	462.2
30°	458.1	454.4	448.5	446.7	444.4
32.5°	440.7	437.5	431.1	428.9	426.6
35°	422.5	419.3	412.9	409.7	407.4
37.5°	403.3	400.5	393.7	390.5	387.3
40°	384.6	380.9	374.1	369.5	367.2
42.5°	364.5	362.6	354.9	349.4	348.0
45°	344.8	341.6	334.3	329.3	327.9
47.5°	324.3	322.0	315.1	309.7	306.0
50°	303.3	301.4	295.0	288.7	285.9
52.5°	282.7	280.4	273.6	268.1	264.4
55°	260.8	259.4	253.0	247.5	244.8
57.5°	240.2	238.9	232.5	227.0	224.3
60°	218.8	216.5	210.6	206.4	204.2
62.5°	197.8	195.9	189.5	185.9	183.6
65°	176.8	174.5	169.9	165.3	163.1
67.5°	155.3	153.5	148.9	144.3	143.9
70°	135.6	132.5	128.8	125.1	123.8
72.5°	114.6	111.4	108.7	106.0	104.6
75°	94.1	91.8	89.5	87.7	87.2
77.5°	74.0	73.1	70.8	70.3	69.0
80°	56.2	54.8	53.9	53.0	52.5
82.5°	38.8	38.4	38.4	37.9	37.5
85°	24.7	24.7	23.7	23.7	23.3
87.5°	11.9	11.4	11.0	11.0	11.0
90°	1.7	7.9	12.5	15.9	17.0
92.5°	14.7	22.1	24.9	26.6	27.2
95°	34.0	39.1	43.1	44.8	44.8
97.5°	54.4	58.9	63.4	65.7	65.7
100°	79.3	81.6	86.7	87.8	87.8
102.5°	105.4	105.9	110.5	112.2	112.7
105°	132.0	132.6	134.8	136.5	138.2
107.5°	159.8	160.3	160.9	163.2	162.6
110°	188.1	189.2	188.6	187.5	189.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	217.5	217.5	216.4	216.4	216.4
115°	247.0	247.0	245.9	245.3	244.7
117.5°	274.8	274.8	274.2	272.5	270.8
120°	302.5	304.8	303.1	300.3	301.4
122.5°	331.4	332.0	331.4	329.7	326.9
125°	359.7	359.7	359.2	358.0	356.9
127.5°	385.2	386.9	385.8	384.7	384.1
130°	412.4	414.1	414.1	413.0	410.7
132.5°	440.2	441.3	440.7	439.6	439.1
135°	464.0	467.4	467.4	466.2	464.5
137.5°	490.6	492.3	493.4	491.7	492.3
140°	517.2	518.4	518.4	517.8	517.2
142.5°	541.6	542.7	542.2	542.2	542.2
145°	563.7	565.9	566.5	565.9	564.3
147.5°	586.3	589.2	588.6	588.0	587.5
150°	606.7	609.0	609.0	609.0	608.4
152.5°	626.0	627.1	627.7	629.4	627.7
155°	645.8	645.8	645.3	647.5	645.3
157.5°	662.8	661.7	661.7	663.4	661.7
160°	677.6	677.0	676.4	678.1	675.3
162.5°	691.2	689.5	688.9	692.3	689.5
165°	703.0	701.3	700.2	703.6	701.3
167.5°	712.7	710.4	710.4	713.8	710.4
170°	720.6	717.8	718.3	721.7	717.8
172.5°	726.3	724.0	724.0	728.0	724.0
175°	731.4	728.5	728.0	731.9	728.0
177.5°	733.6	730.8	730.8	734.8	730.2
180°	732.5	732.5	732.5	732.5	732.5

(END OF REPORT)