

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: P1025413

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025413
REPORT IS A COMBINATION OF REPORTS P995938 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-F
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

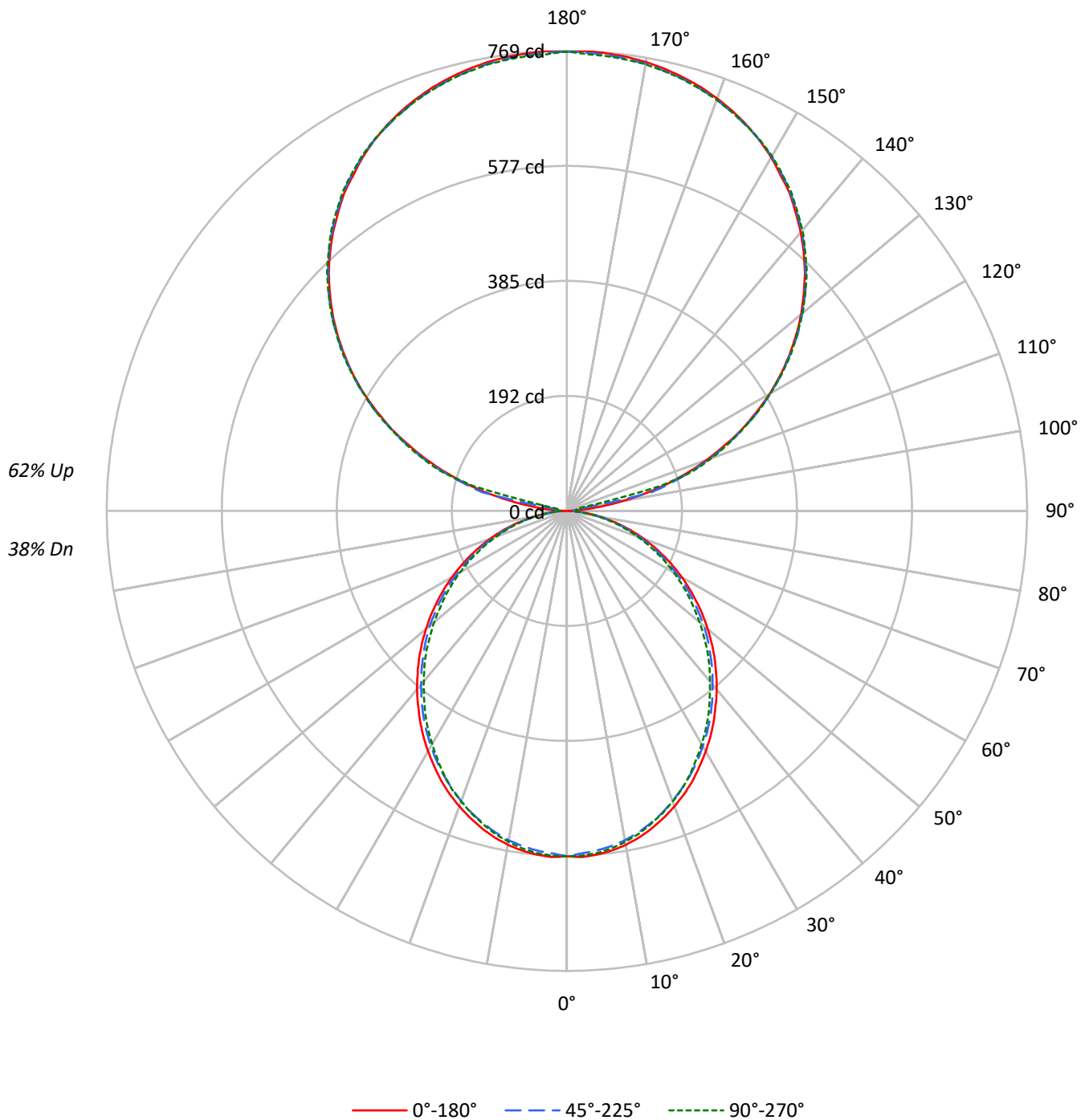
Lumens per Lamp: N/A
Luminaire Lumens: 3859.0 lumens
Efficiency: N/A
Efficacy: 135.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32
3	79	70	63	57	71	64	57	52	52	47	44	41	38	35	31	29	27
4	72	62	54	48	65	56	50	44	46	41	37	37	33	30	28	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	16	14
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4708	4708	4708
5°	4712	4573	4579
10°	4673	4446	4415
15°	4606	4295	4230
20°	4520	4132	4039
25°	4424	3959	3834
30°	4307	3772	3608
35°	4187	3581	3389
40°	4062	3376	3157
45°	3930	3171	2940
50°	3784	2971	2699
55°	3627	2737	2461
60°	3464	2482	2212
65°	3278	2218	1932
70°	3065	1900	1631
75°	2746	1532	1307
80°	2340	1107	919
85°	1819	618	495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3930 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.4
10°-20°	153.3	4.0
20°-30°	225.7	5.8
30°-40°	262.3	6.8
40°-50°	262.3	6.8
50°-60°	229.4	5.9
60°-70°	170.3	4.4
70°-80°	96.6	2.5
80°-90°	29.3	0.8
90°-100°	25.5	0.7
100°-110°	167.8	4.3
110°-120°	320.5	8.3
120°-130°	406.8	10.5
130°-140°	435.2	11.3
140°-150°	406.9	10.5
150°-160°	328.2	8.5
160°-170°	211.6	5.5
170°-180°	72.9	1.9
0°-30°	433.4	11.2
0°-40°	695.7	18.0
0°-60°	1187.4	30.8
0°-90°	1483.6	38.4
90°-120°	513.8	13.3
90°-150°	1762.7	45.7
90°-180°	2375.0	61.5
0°-180°	3859.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	577	575	570	575	574	55
15°	549	547	540	543	542	155
25°	497	494	488	488	486	229
35°	428	425	418	415	413	268
45°	349	346	339	334	332	269
55°	264	263	256	251	248	237
65°	179	177	172	168	165	177
75°	95	93	91	89	88	101
85°	25	25	24	24	24	27
90°	2	8	13	16	17	3
95°	32	12	13	16	17	39
105°	173	176	179	184	164	181
115°	323	324	324	325	325	318
125°	454	456	455	456	457	405
135°	563	562	564	566	567	434
145°	649	650	650	651	652	405
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.4	577.4	577.4	577.4	577.4
2.5°	579.2	577.9	572.8	577.4	576.9
5°	576.9	575.1	570.0	575.1	574.2
7.5°	572.8	570.9	565.4	569.5	569.1
10°	566.8	564.9	558.9	562.6	561.7
12.5°	558.9	557.0	550.6	554.7	553.3
15°	549.2	547.3	540.4	543.2	541.8
17.5°	538.1	535.8	529.3	531.1	530.2
20°	525.6	523.3	516.3	517.7	516.8
22.5°	512.2	508.9	502.0	504.8	502.9
25°	497.4	494.1	487.6	488.1	486.3
27.5°	480.7	477.5	471.4	470.5	468.2
30°	464.0	460.3	454.3	452.5	450.2
32.5°	446.5	443.2	436.7	434.4	432.1
35°	428.0	424.7	418.2	415.0	412.7
37.5°	408.5	405.8	398.8	395.6	392.3
40°	389.6	385.9	378.9	374.3	372.0
42.5°	369.2	367.3	359.5	353.9	352.5
45°	349.3	346.1	338.7	333.6	332.2
47.5°	328.5	326.2	319.2	313.7	310.0
50°	307.2	305.4	298.9	292.4	289.6
52.5°	286.4	284.1	277.1	271.6	267.9
55°	264.2	262.8	256.3	250.8	248.0
57.5°	243.4	242.0	235.5	229.9	227.2
60°	221.6	219.3	213.3	209.1	206.8
62.5°	200.3	198.5	192.0	188.3	186.0
65°	179.0	176.7	172.1	167.5	165.2
67.5°	157.3	155.5	150.8	146.2	145.7
70°	137.4	134.2	130.5	126.8	125.4
72.5°	116.1	112.9	110.1	107.3	105.9
75°	95.3	93.0	90.7	88.8	88.4
77.5°	75.0	74.0	71.7	71.2	69.9
80°	56.9	55.5	54.6	53.7	53.2
82.5°	39.3	38.9	38.9	38.4	37.9
85°	25.0	25.0	24.1	24.1	23.6
87.5°	12.0	11.6	11.1	11.1	11.1
90°	1.7	8.0	12.6	16.1	17.2
92.5°	8.6	7.5	12.1	15.5	15.5
95°	31.6	12.1	12.6	16.1	16.7
97.5°	60.3	72.9	12.6	15.5	16.1
100°	94.2	104.5	25.3	15.5	16.1
102.5°	132.1	138.9	145.8	16.7	16.7
105°	172.8	176.3	179.1	184.3	163.6
107.5°	210.1	211.9	215.9	218.8	221.1
110°	248.0	249.8	253.2	254.4	256.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.8	288.2	289.4	288.8	291.1
115°	322.7	324.4	323.8	325.0	325.0
117.5°	356.6	358.9	360.6	360.0	360.0
120°	391.0	393.3	392.7	393.9	392.7
122.5°	423.2	424.3	425.5	426.0	424.9
125°	453.6	455.9	454.7	456.5	457.0
127.5°	482.9	483.4	486.3	485.7	485.2
130°	511.0	511.6	513.3	513.9	513.9
132.5°	536.8	538.0	540.3	540.9	540.3
135°	562.7	562.1	564.4	565.6	566.7
137.5°	585.7	585.7	588.5	589.7	589.1
140°	608.0	609.2	610.3	612.1	612.6
142.5°	628.1	630.4	631.0	632.2	632.2
145°	648.8	650.5	650.5	651.1	652.3
147.5°	664.9	668.3	667.8	668.3	668.9
150°	682.7	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)