

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: P1025431

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025431
REPORT IS A COMBINATION OF REPORTS P995956 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-F
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

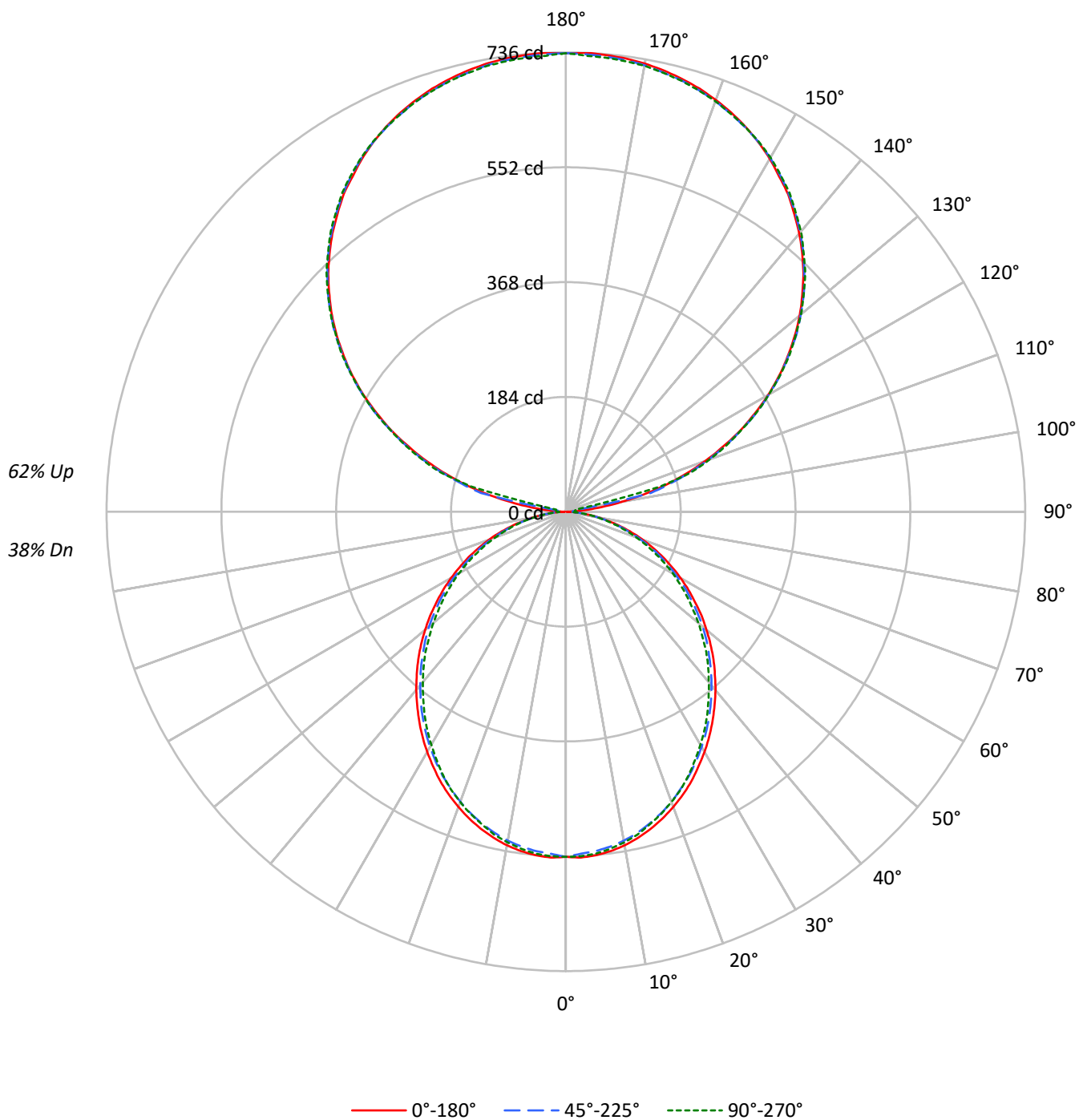
Lumens per Lamp: N/A
Luminaire Lumens: 3694.0 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	4509	4509	4509
5°	4512	4379	4384
10°	4474	4257	4227
15°	4409	4112	4050
20°	4327	3956	3867
25°	4235	3791	3671
30°	4124	3612	3454
35°	4009	3430	3245
40°	3889	3233	3023
45°	3763	3036	2815
50°	3623	2844	2585
55°	3472	2621	2356
60°	3317	2376	2118
65°	3139	2124	1849
70°	2936	1819	1563
75°	2631	1466	1251
80°	2242	1061	879
85°	1739	589	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3763 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.4
10°-20°	146.8	4.0
20°-30°	216.1	5.8
30°-40°	251.2	6.8
40°-50°	251.1	6.8
50°-60°	219.6	5.9
60°-70°	163.1	4.4
70°-80°	92.5	2.5
80°-90°	28.0	0.8
90°-100°	24.4	0.7
100°-110°	160.6	4.3
110°-120°	306.7	8.3
120°-130°	389.4	10.5
130°-140°	416.5	11.3
140°-150°	389.5	10.5
150°-160°	314.1	8.5
160°-170°	202.6	5.5
170°-180°	69.8	1.9
0°-30°	415.0	11.2
0°-40°	666.1	18.0
0°-60°	1136.9	30.8
0°-90°	1420.5	38.5
90°-120°	491.7	13.3
90°-150°	1687.0	45.7
90°-180°	2273.0	61.5
0°-180°	3694.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	552	551	546	551	550	52
15°	526	524	517	520	519	148
25°	476	473	467	467	466	219
35°	410	407	400	397	395	256
45°	334	331	324	319	318	258
55°	253	252	245	240	237	227
65°	171	169	165	160	158	170
75°	91	89	87	85	85	97
85°	24	24	23	23	23	26
90°	2	8	12	15	16	3
95°	30	12	12	15	16	37
105°	165	169	172	176	157	173
115°	309	310	310	311	311	304
125°	434	436	435	437	437	388
135°	538	538	540	541	542	415
145°	621	623	623	623	624	388
155°	681	681	680	682	680	314
165°	718	716	716	720	715	203
175°	735	731	732	737	730	70
180°	735	735	735	735	735	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.9	552.9	552.9	552.9	552.9
2.5°	554.6	553.3	548.4	552.9	552.4
5°	552.4	550.6	545.8	550.6	549.8
7.5°	548.4	546.6	541.3	545.3	544.9
10°	542.7	540.9	535.1	538.7	537.8
12.5°	535.1	533.4	527.2	531.1	529.8
15°	525.8	524.1	517.4	520.1	518.7
17.5°	515.2	513.0	506.8	508.6	507.7
20°	503.2	501.0	494.4	495.7	494.8
22.5°	490.4	487.3	480.6	483.3	481.5
25°	476.2	473.1	466.9	467.4	465.6
27.5°	460.3	457.2	451.4	450.5	448.3
30°	444.3	440.8	435.0	433.2	431.0
32.5°	427.5	424.4	418.2	416.0	413.8
35°	409.8	406.7	400.5	397.4	395.1
37.5°	391.2	388.5	381.9	378.8	375.7
40°	373.0	369.5	362.8	358.4	356.2
42.5°	353.5	351.7	344.2	338.9	337.6
45°	334.5	331.4	324.3	319.4	318.1
47.5°	314.5	312.3	305.7	300.3	296.8
50°	294.1	292.4	286.2	280.0	277.3
52.5°	274.2	272.0	265.4	260.0	256.5
55°	252.9	251.6	245.4	240.1	237.4
57.5°	233.0	231.7	225.5	220.2	217.5
60°	212.2	210.0	204.2	200.2	198.0
62.5°	191.8	190.0	183.8	180.3	178.1
65°	171.4	169.2	164.8	160.4	158.1
67.5°	150.6	148.8	144.4	140.0	139.5
70°	131.6	128.5	124.9	121.4	120.1
72.5°	111.2	108.1	105.4	102.8	101.4
75°	91.3	89.0	86.8	85.1	84.6
77.5°	71.8	70.9	68.7	68.2	66.9
80°	54.5	53.2	52.3	51.4	50.9
82.5°	37.7	37.2	37.2	36.8	36.3
85°	23.9	23.9	23.0	23.0	22.6
87.5°	11.5	11.1	10.6	10.6	10.6
90°	1.6	7.7	12.1	15.4	16.5
92.5°	8.2	7.1	11.5	14.8	14.8
95°	30.2	11.5	12.1	15.4	15.9
97.5°	57.7	69.8	12.1	14.8	15.4
100°	90.1	100.0	24.2	14.8	15.4
102.5°	126.4	133.0	139.6	15.9	15.9
105°	165.4	168.7	171.5	176.4	156.6
107.5°	201.1	202.8	206.6	209.4	211.6
110°	237.4	239.0	242.3	243.4	245.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	272.6	275.9	277.0	276.4	278.6
115°	308.8	310.5	309.9	311.0	311.0
117.5°	341.3	343.5	345.1	344.6	344.6
120°	374.2	376.4	375.9	377.0	375.9
122.5°	405.0	406.1	407.2	407.8	406.7
125°	434.1	436.3	435.2	436.9	437.4
127.5°	462.2	462.7	465.5	464.9	464.4
130°	489.1	489.6	491.3	491.8	491.8
132.5°	513.8	514.9	517.1	517.7	517.1
135°	538.5	538.0	540.2	541.3	542.4
137.5°	560.5	560.5	563.3	564.4	563.8
140°	582.0	583.1	584.1	585.8	586.3
142.5°	601.2	603.4	603.9	605.0	605.0
145°	621.0	622.6	622.6	623.2	624.3
147.5°	636.4	639.7	639.1	639.7	640.2
150°	653.4	655.6	655.0	655.0	655.6
152.5°	667.7	669.3	668.2	669.3	668.8
155°	680.9	681.4	679.8	682.0	680.3
157.5°	692.4	692.4	690.2	693.0	690.2
160°	702.3	700.6	700.1	703.4	700.1
162.5°	711.1	708.9	708.3	711.6	707.8
165°	718.2	715.5	715.5	719.9	714.9
167.5°	724.3	721.5	721.0	725.9	720.4
170°	729.2	725.9	726.5	730.9	725.4
172.5°	732.5	729.2	729.8	734.2	728.1
175°	734.7	731.4	732.0	736.9	730.3
177.5°	736.4	732.5	733.6	738.0	731.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)