

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: P1025428

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025428
REPORT IS A COMBINATION OF REPORTS P995953 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-D
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

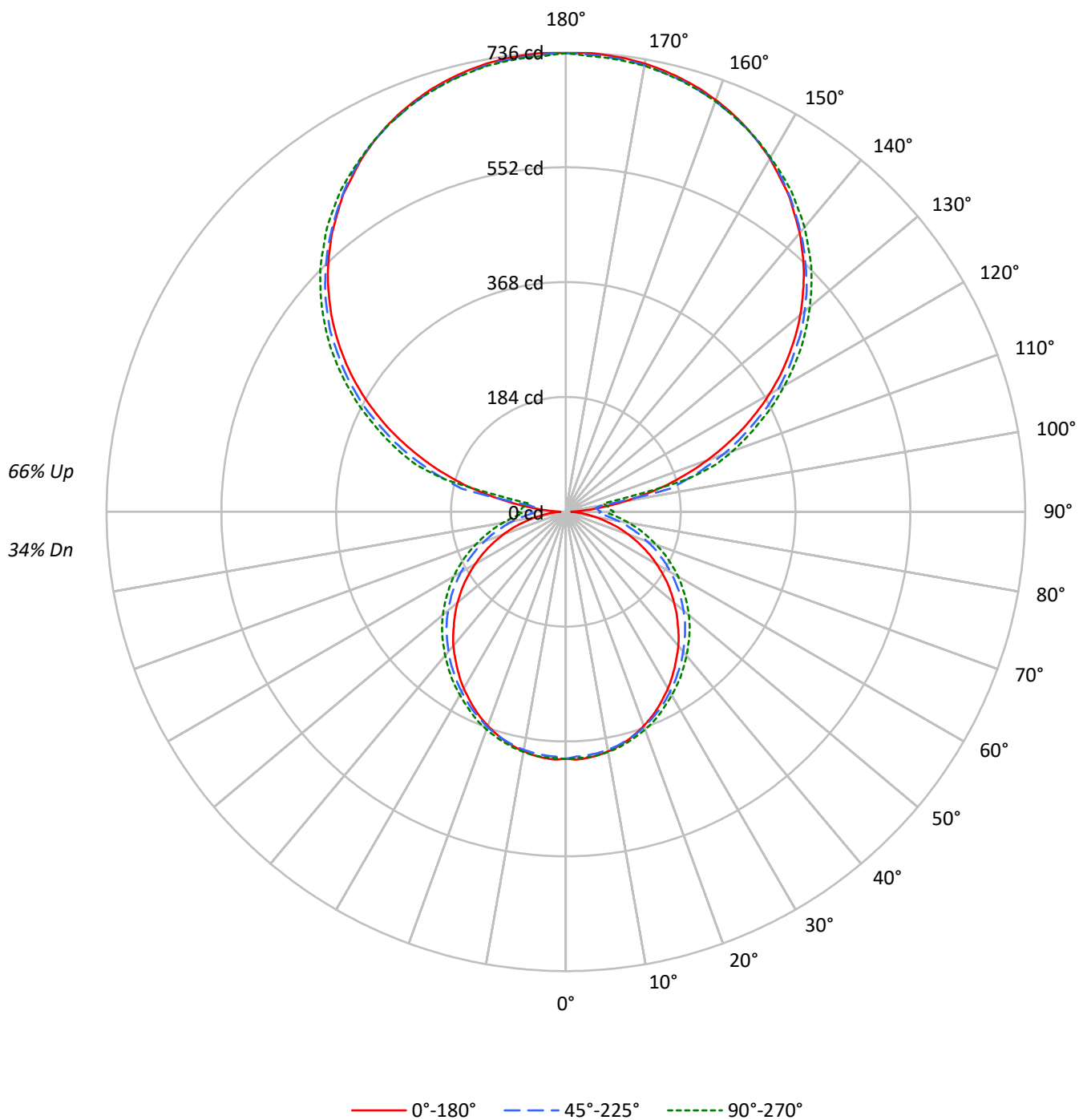
Lumens per Lamp: N/A
Luminaire Lumens: 3624.0 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42
1	94	89	85	81	84	80	77	74	64	62	60	50	48	46	36	35	34
2	85	77	71	66	76	70	65	60	56	52	49	43	40	38	31	29	28
3	77	68	60	54	69	61	55	50	49	44	41	38	35	32	27	25	23
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	24	22	20
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13
8	51	38	31	26	46	35	28	24	28	23	20	22	18	16	16	14	12
9	47	35	28	23	42	32	25	21	26	21	17	20	17	14	15	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	11	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	1.0
10°-20°	107.4	3.0
20°-30°	162.4	4.5
30°-40°	196.5	5.4
40°-50°	207.7	5.7
50°-60°	195.5	5.4
60°-70°	162.2	4.5
70°-80°	113.8	3.1
80°-90°	65.7	1.8
90°-100°	62.6	1.7
100°-110°	188.9	5.2
110°-120°	325.7	9.0
120°-130°	400.0	11.0
130°-140°	421.1	11.6
140°-150°	390.4	10.8
150°-160°	314.1	8.7
160°-170°	202.6	5.6
170°-180°	69.8	1.9
0°-30°	307.3	8.5
0°-40°	503.8	13.9
0°-60°	907.0	25.0
0°-90°	1248.8	34.5
90°-120°	577.2	15.9
90°-150°	1788.7	49.4
90°-180°	2375.0	65.5
0°-180°	3624.0	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°	9	32	56	72	77	6
95°	36	32	51	66	70	42
105°	169	182	201	217	200	178
115°	312	317	331	342	345	307
125°	436	438	448	458	461	389
135°	539	539	544	552	556	416
145°	621	623	623	626	629	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°	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°	8.7	32.5	56.0	72.1	76.8
92.5°	14.8	29.3	52.7	68.4	72.0
95°	36.0	31.9	50.6	65.9	70.4
97.5°	63.0	88.0	48.4	62.7	67.2
100°	95.0	116.4	57.9	60.4	64.1
102.5°	131.3	147.6	171.1	58.9	62.4
105°	169.4	181.5	200.7	216.7	200.5
107.5°	205.1	214.3	233.6	247.5	252.8
110°	240.9	248.7	267.6	278.8	284.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	275.7	284.3	300.0	309.2	314.9
115°	311.5	317.1	330.7	341.6	344.7
117.5°	344.0	348.8	363.7	372.5	376.1
120°	376.4	379.9	392.3	402.3	404.7
122.5°	407.2	408.3	421.4	430.8	432.8
125°	435.9	437.6	447.6	457.7	460.9
127.5°	464.0	464.0	475.7	483.1	485.7
130°	490.4	490.5	499.3	507.8	510.4
132.5°	515.1	515.8	523.3	531.4	533.5
135°	539.4	538.9	544.2	552.4	556.1
137.5°	561.4	560.9	565.5	573.3	574.9
140°	582.9	583.5	585.0	592.4	595.2
142.5°	601.6	603.8	603.9	609.9	611.6
145°	621.4	622.6	622.6	625.9	628.7
147.5°	636.8	639.7	639.1	640.1	642.4
150°	653.8	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)