

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: P1025411

Luminaire Tested: S124DIP-B350D590UB35-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025411
REPORT IS A COMBINATION OF REPORTS P995936 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-D1
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

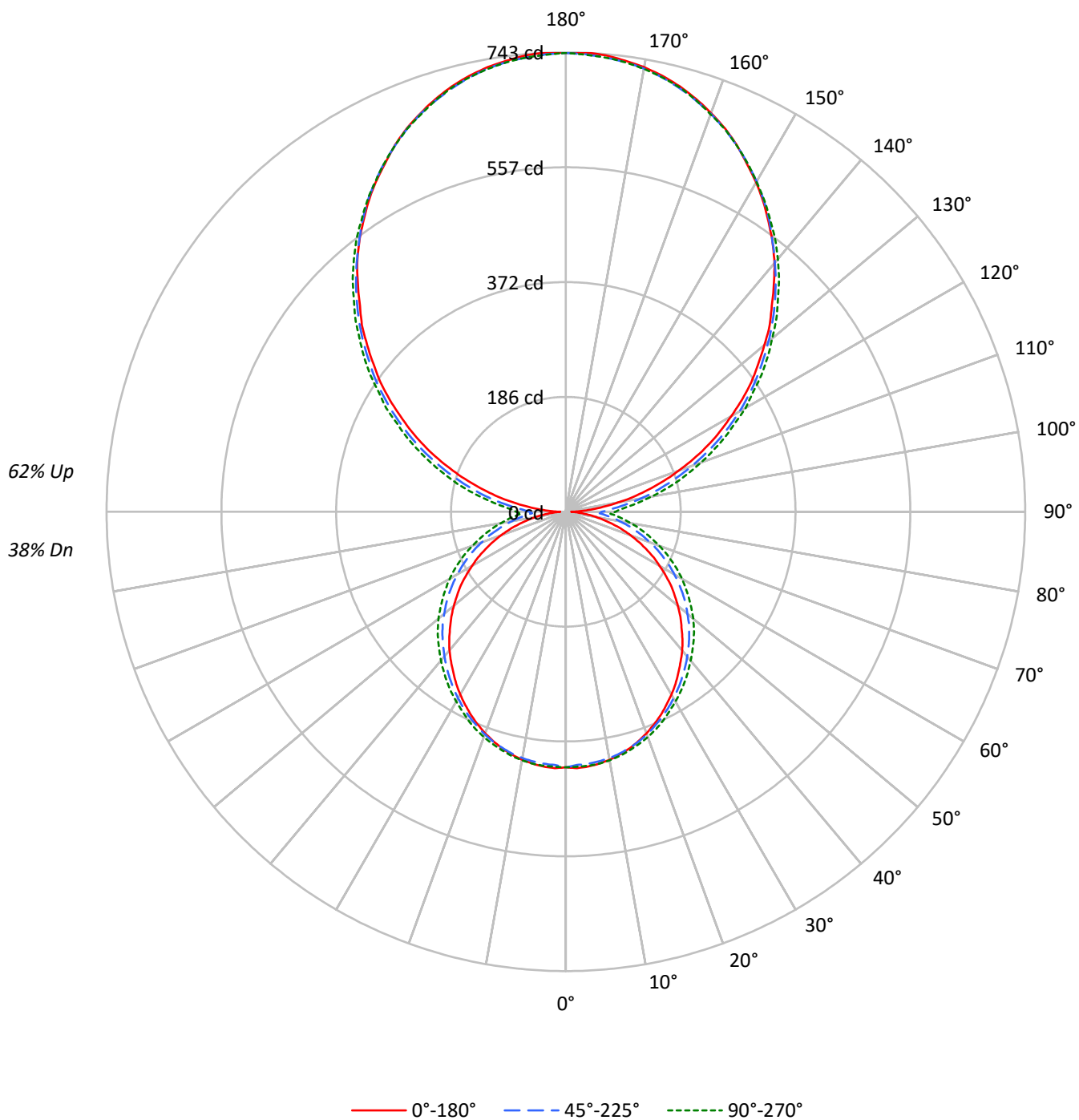
Lumens per Lamp: N/A
Luminaire Lumens: 3470.0 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45
1	94	90	86	82	85	81	78	75	66	63	61	51	50	48	38	37	36
2	85	78	71	66	77	71	65	61	57	53	50	45	42	40	33	31	30
3	78	68	61	55	70	62	55	50	50	45	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21
5	65	53	45	39	59	48	41	36	39	34	30	31	27	24	23	21	18
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	27	23	25	21	18	19	16	14
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	15	13
9	47	35	28	23	43	32	26	21	27	21	18	21	17	15	16	13	11
10	44	32	25	20	40	30	23	19	24	19	16	20	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2978 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	1.1
10°-20°	112.2	3.2
20°-30°	169.6	4.9
30°-40°	205.2	5.9
40°-50°	217.0	6.3
50°-60°	204.2	5.9
60°-70°	169.4	4.9
70°-80°	118.9	3.4
80°-90°	68.6	2.0
90°-100°	88.3	2.5
100°-110°	174.5	5.0
110°-120°	266.0	7.7
120°-130°	335.8	9.7
130°-140°	369.5	10.6
140°-150°	359.4	10.4
150°-160°	301.4	8.7
160°-170°	200.6	5.8
170°-180°	70.2	2.0
0°-30°	321.0	9.3
0°-40°	526.2	15.2
0°-60°	947.4	27.3
0°-90°	1304.3	37.6
90°-120°	528.7	15.2
90°-150°	1593.4	45.9
90°-180°	2166.0	62.4
0°-180°	3470.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	9	34	58	75	80	8
95°	40	61	84	98	102	42
105°	138	148	167	180	186	147
115°	253	257	271	280	283	250
125°	366	366	377	385	386	327
135°	471	474	478	484	485	365
145°	572	574	574	576	576	358
155°	654	654	654	656	654	301
165°	712	711	710	713	711	201
175°	741	738	738	742	738	70
180°	742	742	742	742	742	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	9.1	33.9	58.4	75.3	80.1
92.5°	21.8	45.5	68.3	83.0	87.3
95°	40.4	60.9	83.9	98.1	102.2
97.5°	60.7	78.7	102.2	116.6	120.7
100°	85.5	99.8	123.0	136.7	139.9
102.5°	111.9	122.6	144.8	158.6	162.8
105°	138.0	147.7	167.1	180.4	185.9
107.5°	166.1	174.5	191.2	205.1	207.7
110°	194.3	201.9	217.6	227.0	232.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.6	229.2	243.4	253.5	257.2
115°	253.1	257.2	270.9	280.5	283.2
117.5°	281.2	284.0	297.2	305.3	307.3
120°	308.8	312.5	324.2	330.6	335.5
122.5°	338.1	338.7	350.6	358.2	358.5
125°	366.4	365.9	376.9	384.6	386.1
127.5°	392.2	393.5	401.5	408.8	411.4
130°	419.3	420.5	427.9	435.2	435.6
132.5°	447.4	448.1	453.1	459.8	462.0
135°	471.0	474.5	477.8	484.0	485.0
137.5°	498.0	499.3	502.3	507.6	510.4
140°	525.0	525.7	526.1	531.6	533.4
142.5°	549.3	550.4	549.4	554.5	556.3
145°	571.7	573.5	574.0	576.3	576.3
147.5°	594.6	597.0	596.4	596.3	597.6
150°	615.3	617.1	617.1	617.1	616.5
152.5°	634.3	635.5	636.0	637.8	636.0
155°	654.4	654.4	653.8	656.1	653.8
157.5°	671.6	670.5	670.5	672.2	670.5
160°	686.5	686.0	685.4	687.1	684.3
162.5°	700.3	698.6	698.0	701.5	698.6
165°	712.4	710.7	709.5	713.0	710.7
167.5°	722.1	719.8	719.8	723.3	719.8
170°	730.2	727.3	727.9	731.3	727.3
172.5°	735.9	733.6	733.6	737.6	733.6
175°	741.1	738.2	737.6	741.7	737.6
177.5°	743.4	740.5	740.5	744.5	739.9
180°	742.2	742.2	742.2	742.2	742.2

(END OF REPORT)