

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: P1026330

Luminaire Tested: S124RDIP-B350D590UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026330
REPORT IS A COMBINATION OF REPORTS P999360 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B350D590UB30-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

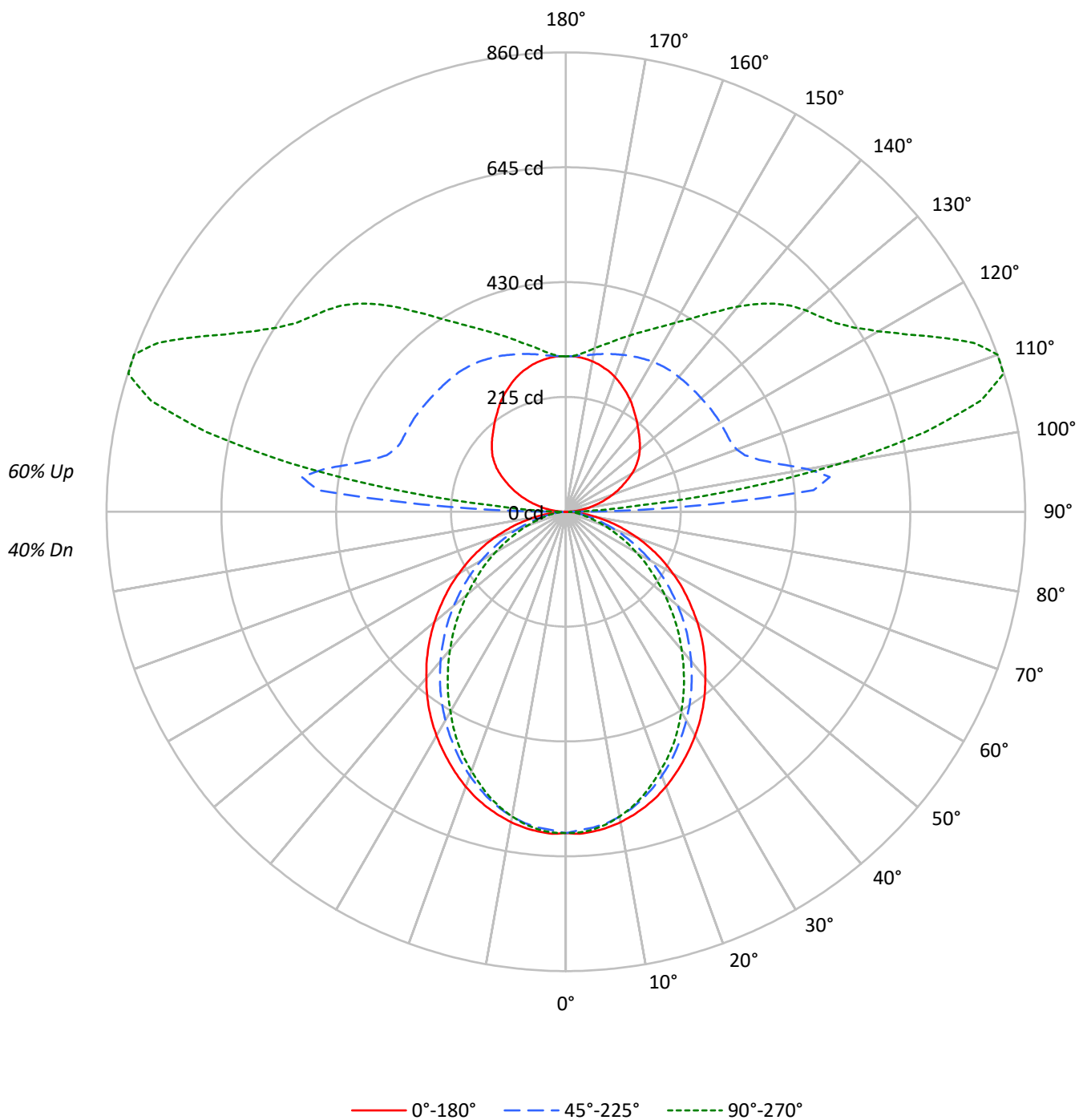
Lumens per Lamp: N/A
Luminaire Lumens: 3514.2 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47
1	96	92	88	84	87	83	80	77	68	66	64	54	53	52	41	41	40
2	87	80	74	69	79	73	68	64	60	56	53	48	45	43	37	35	34
3	80	71	63	58	72	64	58	53	53	49	45	43	39	37	33	31	29
4	73	63	55	49	66	57	51	45	47	42	38	38	34	32	29	27	25
5	67	56	48	42	61	51	44	39	42	37	33	34	30	28	27	24	22
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	19	17
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4906	4906	4906
5°	4906	4760	4761
10°	4865	4610	4555
15°	4798	4422	4312
20°	4710	4209	4036
25°	4601	3979	3766
30°	4493	3744	3463
35°	4376	3507	3166
40°	4236	3251	2862
45°	4104	2996	2560
50°	3956	2719	2254
55°	3794	2435	1938
60°	3614	2133	1626
65°	3441	1786	1325
70°	3197	1423	1012
75°	2882	1035	708
80°	2406	635	510
85°	1812	366	281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4104 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	1.6
10°-20°	157.7	4.5
20°-30°	227.7	6.5
30°-40°	258.1	7.3
40°-50°	249.2	7.1
50°-60°	207.2	5.9
60°-70°	143.0	4.1
70°-80°	72.3	2.1
80°-90°	19.5	0.6
90°-100°	216.1	6.1
100°-110°	439.5	12.5
110°-120°	391.8	11.1
120°-130°	329.1	9.4
130°-140°	274.6	7.8
140°-150°	209.7	6.0
150°-160°	147.4	4.2
160°-170°	86.7	2.5
170°-180°	28.2	0.8
0°-30°	442.0	12.6
0°-40°	700.1	19.9
0°-60°	1156.4	32.9
0°-90°	1391.1	39.6
90°-120°	1047.4	29.8
90°-150°	1860.8	53.0
90°-180°	2123.0	60.4
0°-180°	3514.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	602	602	602	602	602	
5°	601	599	593	598	597	57
15°	572	568	556	556	552	161
25°	517	509	490	482	478	238
35°	447	432	410	394	386	280
45°	365	348	320	298	289	281
55°	276	258	228	204	195	247
65°	188	168	139	119	113	186
75°	100	83	61	51	48	105
85°	25	16	14	13	13	27
90°	1	5	10	11	12	3
95°	19	59	466	231	140	21
105°	67	97	375	807	804	71
115°	118	148	334	642	772	117
125°	164	195	333	547	616	146
135°	195	232	330	485	551	151
145°	225	257	328	409	450	141
155°	256	276	319	361	377	118
165°	278	287	306	324	329	79
175°	290	291	293	297	296	28
180°	291	291	291	291	291	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	601.6	601.6	601.6	601.6	601.6
2.5°	603.4	601.6	596.5	601.6	601.1
5°	600.7	598.8	593.3	597.9	597.0
7.5°	596.5	594.7	587.8	591.0	589.6
10°	590.1	587.8	579.5	581.3	579.5
12.5°	581.8	579.0	568.9	569.8	567.0
15°	572.1	567.9	556.4	555.5	552.3
17.5°	561.0	555.1	541.7	539.4	534.8
20°	547.7	541.7	526.0	522.3	516.4
22.5°	532.9	526.0	509.0	503.0	498.4
25°	517.3	509.0	490.1	482.3	477.7
27.5°	501.2	491.0	471.2	462.0	455.6
30°	484.1	472.6	450.9	439.4	432.1
32.5°	466.2	452.8	430.2	416.4	409.5
35°	447.3	432.5	409.5	393.8	385.5
37.5°	427.5	412.3	386.9	369.9	361.6
40°	406.3	391.1	364.8	345.5	337.2
42.5°	386.0	369.9	342.2	322.4	313.7
45°	364.8	347.8	320.1	297.6	289.3
47.5°	343.2	325.7	297.1	273.6	264.4
50°	321.1	303.1	273.6	250.6	241.8
52.5°	298.5	281.0	250.6	227.1	217.9
55°	276.4	257.9	228.0	204.1	195.3
57.5°	254.7	235.4	205.9	181.5	175.0
60°	231.2	212.8	183.3	159.4	152.0
62.5°	210.0	190.7	160.3	138.6	133.1
65°	187.9	168.1	138.6	118.8	113.3
67.5°	164.9	146.0	118.4	100.9	94.4
70°	143.3	123.9	97.7	82.5	77.8
72.5°	120.2	103.2	78.8	66.3	62.2
75°	100.0	82.9	61.3	50.7	47.9
77.5°	78.8	64.0	45.6	38.2	37.3
80°	58.5	45.1	31.3	29.9	29.5
82.5°	41.0	29.0	22.6	21.6	21.2
85°	24.9	15.7	14.3	13.4	13.4
87.5°	10.6	6.9	6.4	6.0	6.4
90°	0.6	4.6	10.3	11.4	12.0
92.5°	8.0	44.0	224.0	74.1	52.0
95°	18.9	59.4	465.8	230.6	139.5
97.5°	31.4	65.7	498.4	471.0	334.9
100°	43.4	74.3	459.5	651.6	524.1
102.5°	54.9	84.6	410.9	764.8	688.7
105°	66.9	96.9	374.9	807.3	804.2
107.5°	80.0	109.4	351.5	794.5	859.0
110°	93.2	122.0	340.6	748.8	860.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	105.7	134.6	335.5	692.8	826.5
115°	117.7	147.8	334.4	642.4	772.2
117.5°	130.3	160.0	333.8	603.0	719.0
120°	142.9	172.0	333.8	576.4	675.6
122.5°	154.3	183.8	333.2	559.0	641.3
125°	164.0	194.9	332.6	546.7	616.1
127.5°	173.2	205.2	331.5	535.0	600.1
130°	180.6	215.2	330.9	521.0	586.4
132.5°	188.0	223.8	330.4	504.4	571.0
135°	194.9	232.0	329.8	485.2	551.0
137.5°	201.8	239.2	329.8	464.6	527.5
140°	209.2	245.8	329.2	444.7	501.8
142.5°	217.2	251.8	329.2	426.1	474.4
145°	224.6	257.2	328.1	409.2	449.8
147.5°	233.2	262.4	326.4	395.2	427.0
150°	241.2	267.2	324.6	382.4	408.1
152.5°	248.6	271.8	321.8	371.5	390.9
155°	255.5	275.8	318.9	361.2	376.7
157.5°	262.3	279.5	316.1	351.5	363.5
160°	268.6	282.6	312.6	341.8	351.5
162.5°	274.3	285.2	309.2	332.4	340.1
165°	278.3	286.9	305.8	323.8	328.6
167.5°	282.9	288.4	302.4	316.4	319.5
170°	285.8	289.5	298.9	309.0	310.9
172.5°	288.6	290.4	295.5	302.4	302.4
175°	290.4	290.9	293.2	297.2	296.1
177.5°	291.5	290.9	291.5	293.5	291.5
180°	290.9	290.9	290.9	290.9	290.9

(END OF REPORT)