

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: P1026341

Luminaire Tested: S124RDIP-B350D590UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026341
REPORT IS A COMBINATION OF REPORTS P999371 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B350D590UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

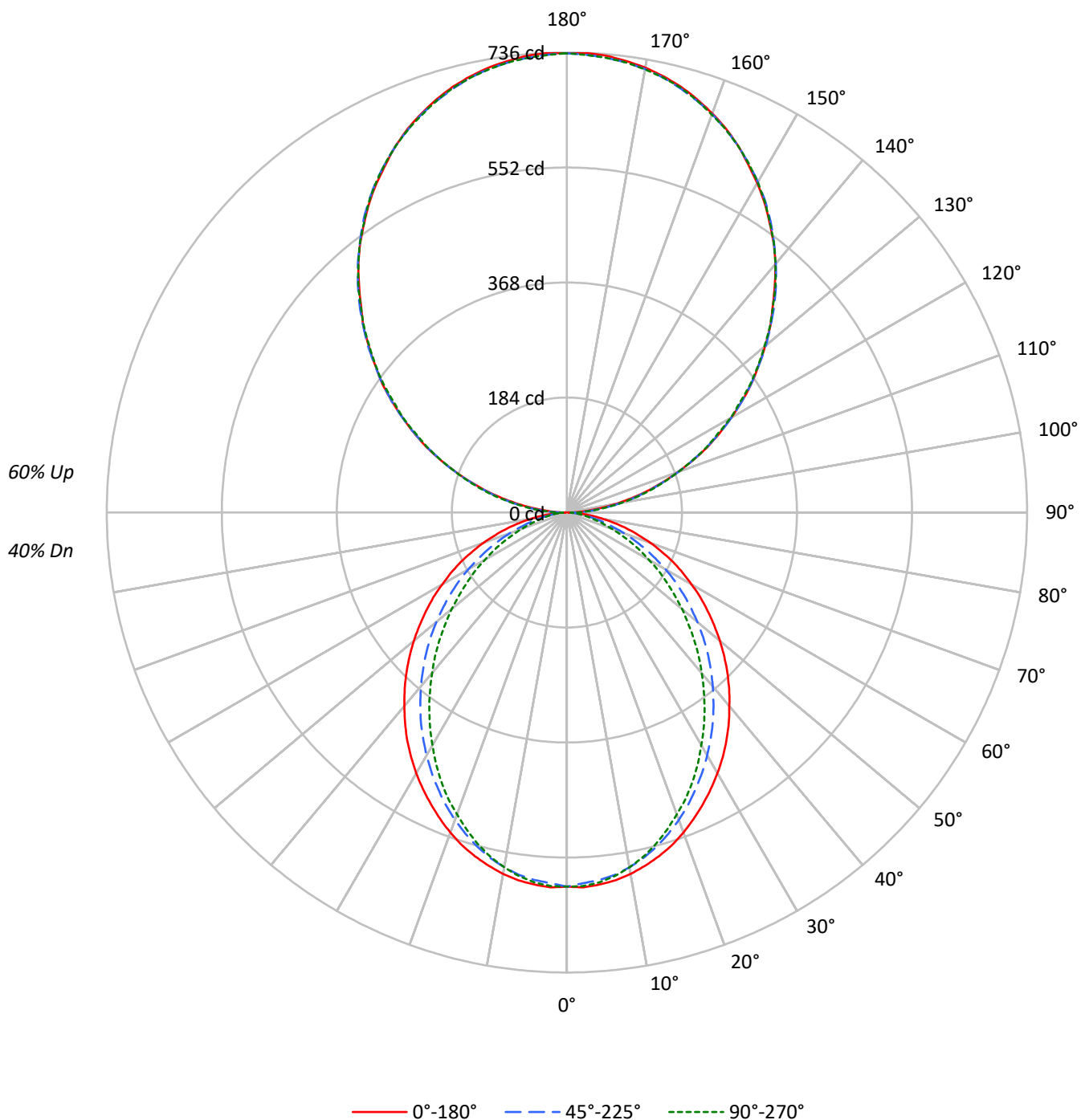
Lumens per Lamp: N/A
Luminaire Lumens: 3423.0 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	96	96	96	96	78	78	78	62	62	62	47	47	47
1	96	92	88	85	87	84	81	78	69	66	64	55	53	52	42	41	40
2	87	80	74	69	79	73	68	64	60	57	54	48	46	44	37	36	34
3	80	71	64	58	73	65	59	54	53	49	45	43	40	37	33	31	29
4	73	63	55	49	66	57	51	46	48	43	39	38	35	32	30	27	26
5	67	56	48	42	61	51	44	39	43	37	33	35	31	28	27	24	22
6	62	50	42	37	56	46	39	34	38	33	29	31	27	24	25	22	20
7	57	45	37	32	52	42	35	30	35	30	26	28	25	22	22	20	18
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16
9	49	37	30	25	45	35	28	24	29	24	20	24	20	17	19	16	14
10	46	34	27	23	42	32	25	21	27	22	18	22	18	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4880	4880	4880
5°	4881	4736	4737
10°	4840	4586	4531
15°	4773	4400	4291
20°	4686	4188	4016
25°	4578	3959	3747
30°	4471	3726	3445
35°	4354	3489	3150
40°	4214	3235	2847
45°	4084	2981	2547
50°	3935	2705	2242
55°	3775	2423	1928
60°	3597	2122	1617
65°	3425	1777	1318
70°	3179	1415	1008
75°	2867	1030	705
80°	2394	633	506
85°	1797	364	279

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	1.6
10°-20°	156.9	4.6
20°-30°	226.6	6.6
30°-40°	256.8	7.5
40°-50°	247.9	7.2
50°-60°	206.1	6.0
60°-70°	142.3	4.2
70°-80°	71.9	2.1
80°-90°	19.8	0.6
90°-100°	47.9	1.4
100°-110°	143.4	4.2
110°-120°	243.7	7.1
120°-130°	321.4	9.4
130°-140°	360.9	10.5
140°-150°	354.8	10.4
150°-160°	298.4	8.7
160°-170°	198.5	5.8
170°-180°	69.5	2.0
0°-30°	439.8	12.8
0°-40°	696.6	20.3
0°-60°	1150.6	33.6
0°-90°	1384.6	40.4
90°-120°	435.0	12.7
90°-150°	1472.0	43.0
90°-180°	2038.0	59.5
0°-180°	3423.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	598	596	590	595	594	57
15°	569	565	554	553	550	160
25°	515	506	488	480	475	237
35°	445	430	407	392	384	278
45°	363	346	318	296	288	280
55°	275	257	227	203	194	246
65°	187	167	138	118	113	185
75°	100	82	61	50	48	105
85°	25	16	14	13	13	27
90°	2	8	12	16	17	4
95°	34	39	43	45	45	37
105°	132	133	135	137	139	140
115°	248	248	247	246	246	244
125°	361	361	360	359	358	322
135°	465	469	469	468	466	360
145°	565	568	568	568	566	354
155°	648	648	647	649	647	298
165°	705	703	702	706	703	199
175°	734	731	730	734	730	70
180°	735	735	735	735	735	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	598.5	598.5	598.5	598.5	598.5
2.5°	600.4	598.5	593.5	598.5	598.1
5°	597.6	595.8	590.3	594.9	594.0
7.5°	593.5	591.7	584.8	588.0	586.6
10°	587.1	584.8	576.5	578.4	576.5
12.5°	578.8	576.1	566.0	566.9	564.2
15°	569.2	565.1	553.6	552.7	549.5
17.5°	558.2	552.3	539.0	536.7	532.1
20°	544.9	539.0	523.4	519.7	513.8
22.5°	530.3	523.4	506.4	500.5	495.9
25°	514.7	506.4	487.6	479.8	475.3
27.5°	498.6	488.6	468.8	459.7	453.3
30°	481.7	470.2	448.7	437.2	429.9
32.5°	463.8	450.5	428.1	414.3	407.4
35°	445.0	430.3	407.4	391.8	383.6
37.5°	425.3	410.2	385.0	368.0	359.8
40°	404.2	389.1	363.0	343.7	335.5
42.5°	384.1	368.0	340.5	320.8	312.1
45°	363.0	346.0	318.5	296.1	287.8
47.5°	341.4	324.0	295.6	272.2	263.1
50°	319.4	301.6	272.2	249.3	240.6
52.5°	297.0	279.6	249.3	225.9	216.8
55°	275.0	256.6	226.9	203.0	194.3
57.5°	253.4	234.2	204.9	180.6	174.2
60°	230.1	211.7	182.4	158.6	151.2
62.5°	209.0	189.7	159.5	137.9	132.4
65°	187.0	167.3	137.9	118.2	112.7
67.5°	164.1	145.3	117.8	100.4	94.0
70°	142.5	123.3	97.2	82.0	77.5
72.5°	119.6	102.7	78.4	66.0	61.9
75°	99.5	82.5	61.0	50.4	47.7
77.5°	78.4	63.7	45.4	38.0	37.1
80°	58.2	44.9	31.2	29.8	29.3
82.5°	40.8	28.9	22.5	21.5	21.1
85°	24.7	15.6	14.2	13.3	13.3
87.5°	10.5	6.9	6.4	6.0	6.4
90°	1.7	8.0	12.5	15.9	17.0
92.5°	14.8	22.2	25.0	26.7	27.3
95°	34.1	39.2	43.2	44.9	44.9
97.5°	54.5	59.1	63.6	65.9	65.9
100°	79.5	81.8	86.9	88.1	88.1
102.5°	105.7	106.3	110.8	112.5	113.1
105°	132.4	133.0	135.2	136.9	138.6
107.5°	160.2	160.8	161.4	163.6	163.1
110°	188.6	189.8	189.2	188.1	189.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.2	218.2	217.0	217.0	217.0
115°	247.7	247.7	246.6	246.0	245.5
117.5°	275.6	275.6	275.0	273.3	271.6
120°	303.4	305.7	304.0	301.1	302.3
122.5°	332.4	333.0	332.4	330.7	327.8
125°	360.8	360.8	360.2	359.1	358.0
127.5°	386.4	388.1	386.9	385.8	385.2
130°	413.6	415.3	415.3	414.2	411.9
132.5°	441.5	442.6	442.0	440.9	440.3
135°	465.3	468.8	468.8	467.6	465.9
137.5°	492.1	493.8	494.9	493.2	493.8
140°	518.8	519.9	519.9	519.3	518.8
142.5°	543.2	544.3	543.8	543.8	543.8
145°	565.3	567.6	568.2	567.6	565.9
147.5°	588.1	590.9	590.3	589.8	589.2
150°	608.5	610.8	610.8	610.8	610.2
152.5°	627.8	629.0	629.6	631.3	629.6
155°	647.7	647.7	647.2	649.4	647.2
157.5°	664.8	663.6	663.6	665.3	663.6
160°	679.6	679.0	678.4	680.1	677.3
162.5°	693.2	691.5	690.9	694.3	691.5
165°	705.1	703.4	702.3	705.7	703.4
167.5°	714.8	712.5	712.5	715.9	712.5
170°	722.7	719.9	720.5	723.9	719.9
172.5°	728.4	726.1	726.1	730.1	726.1
175°	733.5	730.7	730.1	734.1	730.1
177.5°	735.8	733.0	733.0	736.9	732.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)