

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: P1026347

Luminaire Tested: S124RDIP-B350D590UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026347
REPORT IS A COMBINATION OF REPORTS P999377 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B350D590UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

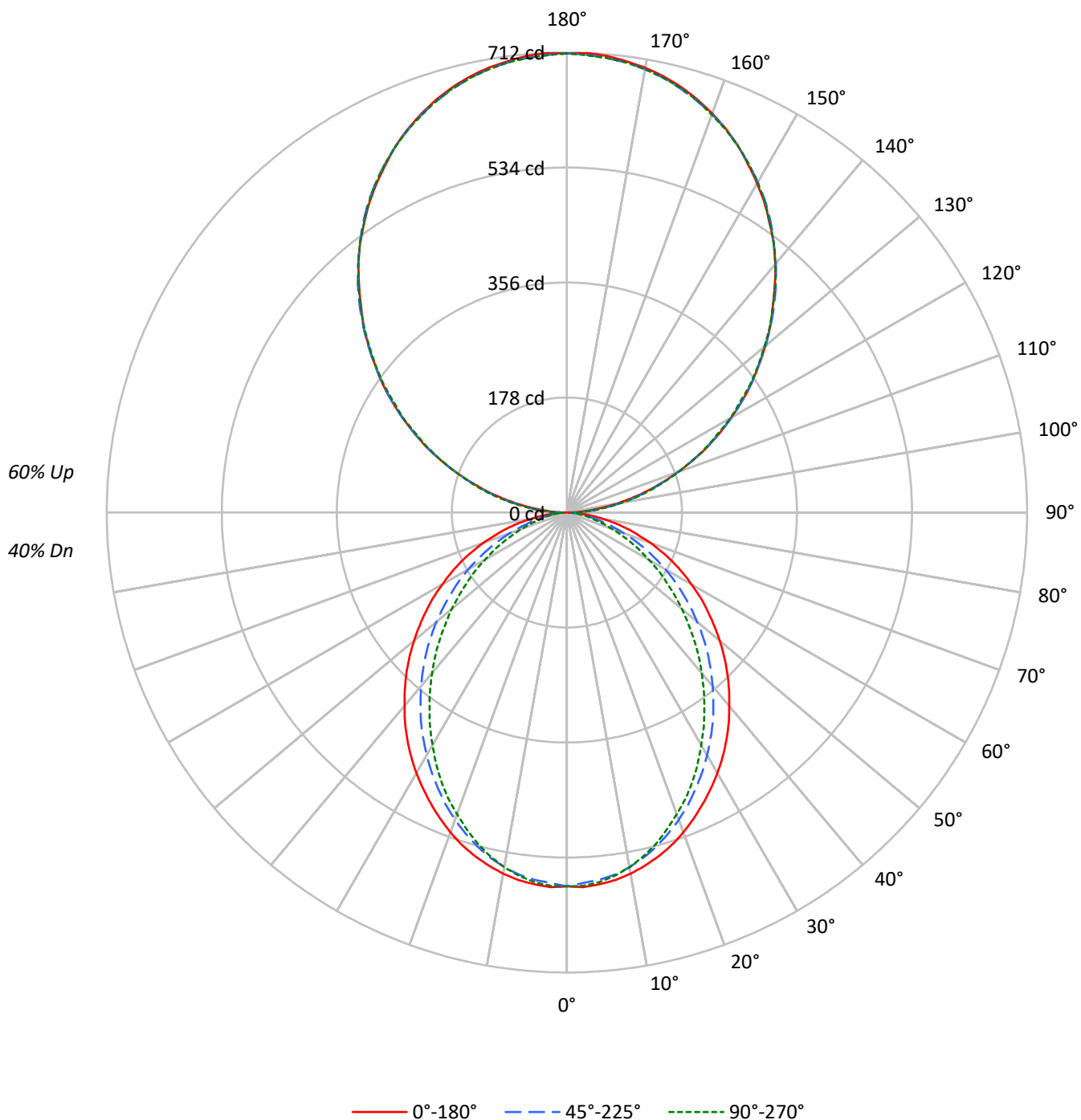
Lumens per Lamp: N/A
Luminaire Lumens: 3310.0 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	34	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°	4718	4718	4718
5°	4719	4579	4579
10°	4679	4434	4381
15°	4615	4254	4148
20°	4530	4049	3882
25°	4426	3827	3622
30°	4323	3602	3331
35°	4209	3373	3045
40°	4075	3127	2752
45°	3948	2882	2462
50°	3804	2616	2168
55°	3649	2342	1864
60°	3477	2051	1564
65°	3311	1719	1275
70°	3074	1367	974
75°	2769	995	682
80°	2316	610	491
85°	1739	351	268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3948 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.6
10°-20°	151.7	4.6
20°-30°	219.0	6.6
30°-40°	248.2	7.5
40°-50°	239.7	7.2
50°-60°	199.3	6.0
60°-70°	137.5	4.2
70°-80°	69.5	2.1
80°-90°	19.2	0.6
90°-100°	46.3	1.4
100°-110°	138.7	4.2
110°-120°	235.6	7.1
120°-130°	310.8	9.4
130°-140°	349.1	10.5
140°-150°	343.1	10.4
150°-160°	288.6	8.7
160°-170°	192.0	5.8
170°-180°	67.2	2.0
0°-30°	425.2	12.8
0°-40°	673.4	20.3
0°-60°	1112.3	33.6
0°-90°	1338.5	40.4
90°-120°	420.7	12.7
90°-150°	1423.7	43.0
90°-180°	1971.0	59.5
0°-180°	3310.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	579	579	579	579	579	
5°	578	576	571	575	574	55
15°	550	546	535	534	531	155
25°	498	490	471	464	460	229
35°	430	416	394	379	371	269
45°	351	334	308	286	278	271
55°	266	248	219	196	188	238
65°	181	162	133	114	109	179
75°	96	80	59	49	46	101
85°	24	15	14	13	13	26
90°	2	8	12	15	16	4
95°	33	38	42	43	43	36
105°	128	129	131	132	134	136
115°	240	240	238	238	237	236
125°	349	349	348	347	346	311
135°	450	453	453	452	451	348
145°	547	549	550	549	547	342
155°	626	626	626	628	626	288
165°	682	680	679	682	680	192
175°	709	707	706	710	706	67
180°	710	710	710	710	710	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	578.6	578.6	578.6	578.6	578.6
2.5°	580.4	578.6	573.8	578.6	578.2
5°	577.7	576.0	570.7	575.1	574.2
7.5°	573.8	572.0	565.3	568.4	567.1
10°	567.6	565.3	557.4	559.1	557.4
12.5°	559.6	556.9	547.2	548.1	545.4
15°	550.3	546.3	535.2	534.3	531.2
17.5°	539.6	533.9	521.0	518.8	514.4
20°	526.8	521.0	506.0	502.4	496.7
22.5°	512.6	506.0	489.6	483.8	479.4
25°	497.6	489.6	471.4	463.9	459.5
27.5°	482.0	472.3	453.3	444.4	438.2
30°	465.7	454.6	433.8	422.7	415.6
32.5°	448.4	435.5	413.8	400.5	393.9
35°	430.2	416.0	393.9	378.8	370.8
37.5°	411.2	396.5	372.2	355.8	347.8
40°	390.8	376.2	350.9	332.3	324.3
42.5°	371.3	355.8	329.2	310.1	301.7
45°	350.9	334.5	307.9	286.2	278.2
47.5°	330.1	313.2	285.8	263.2	254.3
50°	308.8	291.5	263.2	241.0	232.6
52.5°	287.1	270.3	241.0	218.4	209.6
55°	265.8	248.1	219.3	196.3	187.9
57.5°	245.0	226.4	198.0	174.6	168.4
60°	222.4	204.7	176.3	153.3	146.2
62.5°	202.0	183.4	154.2	133.4	128.0
65°	180.8	161.7	133.4	114.3	109.0
67.5°	158.6	140.4	113.9	97.0	90.8
70°	137.8	119.2	93.9	79.3	74.9
72.5°	115.6	99.2	75.8	63.8	59.8
75°	96.1	79.8	58.9	48.7	46.1
77.5°	75.8	61.6	43.9	36.8	35.9
80°	56.3	43.4	30.1	28.8	28.4
82.5°	39.4	27.9	21.7	20.8	20.4
85°	23.9	15.1	13.7	12.8	12.8
87.5°	10.2	6.6	6.2	5.8	6.2
90°	1.6	7.7	12.1	15.4	16.5
92.5°	14.3	21.4	24.2	25.8	26.4
95°	33.0	37.9	41.8	43.4	43.4
97.5°	52.8	57.2	61.5	63.7	63.7
100°	76.9	79.1	84.1	85.2	85.2
102.5°	102.2	102.8	107.2	108.8	109.4
105°	128.0	128.6	130.8	132.4	134.1
107.5°	155.0	155.5	156.1	158.3	157.7
110°	182.4	183.5	183.0	181.9	183.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	211.0	211.0	209.9	209.9	209.9
115°	239.6	239.6	238.5	237.9	237.4
117.5°	266.5	266.5	266.0	264.3	262.7
120°	293.4	295.6	294.0	291.2	292.3
122.5°	321.5	322.0	321.5	319.8	317.1
125°	348.9	348.9	348.4	347.3	346.2
127.5°	373.7	375.3	374.2	373.1	372.6
130°	400.1	401.7	401.7	400.6	398.4
132.5°	427.0	428.1	427.5	426.4	425.9
135°	450.1	453.4	453.4	452.3	450.6
137.5°	475.9	477.5	478.6	477.0	477.5
140°	501.7	502.8	502.8	502.3	501.7
142.5°	525.3	526.4	525.9	525.9	525.9
145°	546.8	549.0	549.5	549.0	547.3
147.5°	568.8	571.5	571.0	570.4	569.9
150°	588.5	590.7	590.7	590.7	590.2
152.5°	607.2	608.3	608.9	610.5	608.9
155°	626.5	626.5	625.9	628.1	625.9
157.5°	642.9	641.8	641.8	643.5	641.8
160°	657.2	656.7	656.1	657.8	655.0
162.5°	670.4	668.8	668.2	671.5	668.8
165°	682.0	680.3	679.2	682.5	680.3
167.5°	691.3	689.1	689.1	692.4	689.1
170°	699.0	696.3	696.8	700.1	696.3
172.5°	704.5	702.3	702.3	706.1	702.3
175°	709.4	706.7	706.1	710.0	706.1
177.5°	711.6	708.9	708.9	712.7	708.3
180°	710.5	710.5	710.5	710.5	710.5

(END OF REPORT)