

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: P1034194

Luminaire Tested: S124RDIW-B575D470UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034194
REPORT IS A COMBINATION OF REPORTS P1000652 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B575D470UB50-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

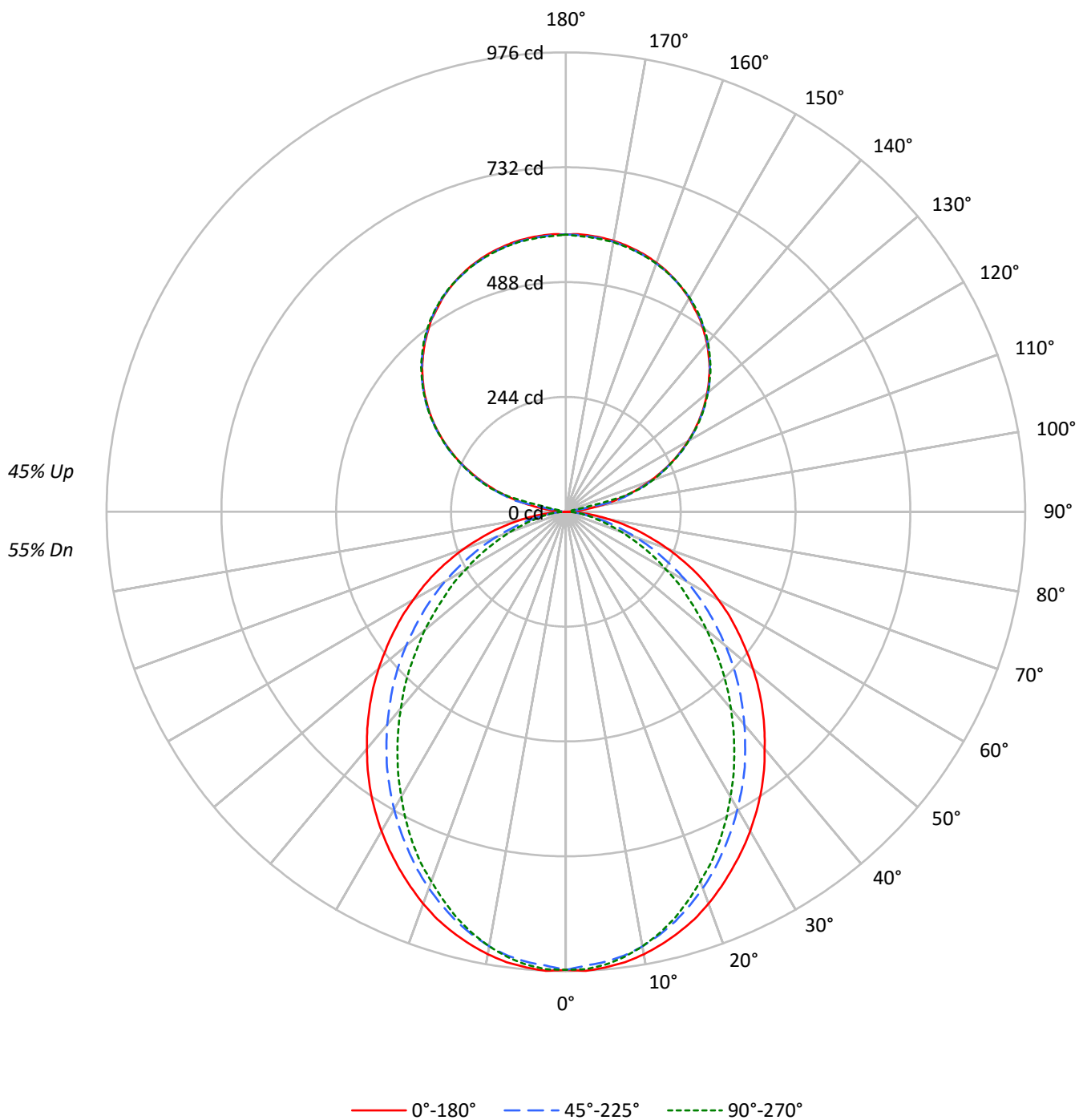
Lumens per Lamp: N/A
Luminaire Lumens: 4073.0 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 37.2
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

TEST NUMBER: P1034194

CATALOG NUMBER: S124RDIW-B575D470UB50-4F0-XX-W2A-F

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	99	95	91	88	92	88	85	82	76	74	72	65	63	62	54	53	52
2	91	83	77	72	84	78	72	68	67	63	60	57	54	52	48	46	44
3	83	73	66	60	77	69	62	57	59	55	51	51	47	44	43	40	38
4	76	65	57	51	70	61	54	49	53	48	43	45	41	38	39	36	33
5	70	58	50	44	65	55	47	42	48	42	38	41	37	33	35	32	29
6	64	52	44	39	60	49	42	37	43	37	33	37	33	29	32	28	26
7	60	47	39	34	55	45	37	32	39	33	29	34	29	26	29	26	23
8	55	43	35	30	51	41	34	29	36	30	26	31	27	23	27	23	21
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19
10	48	36	29	24	45	34	28	23	30	25	21	26	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7937	7937	7937
5°	7937	7701	7702
10°	7870	7459	7370
15°	7762	7156	6977
20°	7620	6811	6530
25°	7444	6439	6093
30°	7271	6059	5603
35°	7080	5674	5123
40°	6853	5260	4630
45°	6641	4849	4142
50°	6400	4400	3647
55°	6139	3940	3136
60°	5848	3451	2630
65°	5569	2890	2144
70°	5171	2301	1639
75°	4660	1674	1146
80°	3895	1028	824
85°	2925	592	453

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6641 cd/sqm

TEST NUMBER: P1034194

CATALOG NUMBER: S124RDIW-B575D470UB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	2.2
10°-20°	255.2	6.3
20°-30°	368.4	9.0
30°-40°	417.6	10.3
40°-50°	403.2	9.9
50°-60°	335.2	8.2
60°-70°	231.3	5.7
70°-80°	116.9	2.9
80°-90°	30.9	0.8
90°-100°	19.6	0.5
100°-110°	128.8	3.2
110°-120°	245.9	6.0
120°-130°	312.2	7.7
130°-140°	333.9	8.2
140°-150°	312.3	7.7
150°-160°	251.8	6.2
160°-170°	162.4	4.0
170°-180°	56.0	1.4
0°-30°	715.2	17.6
0°-40°	1132.7	27.8
0°-60°	1871.1	45.9
0°-90°	2250.2	55.2
90°-120°	394.2	9.7
90°-150°	1352.6	33.2
90°-180°	1823.0	44.8
0°-180°	4073.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	972	969	960	967	966	92
15°	926	919	900	899	894	261
25°	837	824	793	780	773	386
35°	724	700	663	637	624	452
45°	590	563	518	482	468	455
55°	447	417	369	330	316	400
65°	304	272	224	192	183	300
75°	162	134	99	82	78	171
85°	40	25	23	22	22	44
90°	1	6	10	12	13	4
95°	24	9	10	12	13	30
105°	133	135	138	141	126	139
115°	248	249	248	249	249	244
125°	348	350	349	350	351	311
135°	432	431	433	434	435	333
145°	498	499	499	500	500	311
155°	546	546	545	547	545	252
165°	576	574	574	577	573	163
175°	589	586	587	591	586	56
180°	589	589	589	589	589	

TEST NUMBER: P1034194

CATALOG NUMBER: S124RDIW-B575D470UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.3	973.3	973.3	973.3	973.3
2.5°	976.3	973.3	965.1	973.3	972.6
5°	971.8	968.9	959.9	967.4	965.9
7.5°	965.1	962.2	951.0	956.2	954.0
10°	954.7	951.0	937.6	940.5	937.6
12.5°	941.3	936.8	920.4	921.9	917.4
15°	925.6	918.9	900.3	898.8	893.6
17.5°	907.8	898.1	876.5	872.7	865.3
20°	886.1	876.5	851.1	845.1	835.5
22.5°	862.3	851.1	823.5	813.8	806.4
25°	837.0	823.5	793.0	780.3	772.9
27.5°	810.9	794.5	762.4	747.5	737.1
30°	783.3	764.7	729.6	711.0	699.1
32.5°	754.2	732.6	696.1	673.7	662.6
35°	723.7	699.8	662.6	637.2	623.8
37.5°	691.6	667.0	626.0	598.5	585.0
40°	657.3	632.7	590.3	559.0	545.5
42.5°	624.5	598.5	553.7	521.7	507.5
45°	590.3	562.7	518.0	481.5	468.0
47.5°	555.2	526.9	480.7	442.7	427.8
50°	519.5	490.4	442.7	405.4	391.3
52.5°	482.9	454.6	405.4	367.4	352.5
55°	447.2	417.4	368.9	330.2	316.0
57.5°	412.1	380.8	333.1	293.6	283.2
60°	374.1	344.3	296.6	257.9	245.9
62.5°	339.8	308.5	259.4	224.3	215.4
65°	304.1	272.0	224.3	192.3	183.3
67.5°	266.8	236.3	191.5	163.2	152.8
70°	231.8	200.5	158.0	133.4	126.0
72.5°	194.5	166.9	127.4	107.3	100.6
75°	161.7	134.2	99.1	82.0	77.5
77.5°	127.4	103.6	73.8	61.9	60.4
80°	94.7	73.0	50.7	48.4	47.7
82.5°	66.3	47.0	36.5	35.0	34.3
85°	40.2	25.3	23.1	21.6	21.6
87.5°	17.1	11.2	10.4	9.7	10.4
90°	1.3	6.2	9.7	12.3	13.2
92.5°	6.6	5.7	9.3	11.9	11.9
95°	24.2	9.3	9.7	12.3	12.8
97.5°	46.3	56.0	9.7	11.9	12.3
100°	72.3	80.2	19.4	11.9	12.3
102.5°	101.3	106.6	111.9	12.8	12.8
105°	132.6	135.3	137.5	141.4	125.6
107.5°	161.3	162.6	165.7	167.9	169.6
110°	190.3	191.7	194.3	195.2	196.5

TEST NUMBER: P1034194

CATALOG NUMBER: S124RDIW-B575D470UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.5	221.2	222.1	221.6	223.4
115°	247.6	248.9	248.5	249.4	249.4
117.5°	273.6	275.4	276.7	276.2	276.2
120°	300.0	301.8	301.4	302.2	301.4
122.5°	324.7	325.6	326.5	326.9	326.0
125°	348.1	349.8	348.9	350.3	350.7
127.5°	370.5	371.0	373.2	372.7	372.3
130°	392.1	392.6	393.9	394.3	394.3
132.5°	412.0	412.8	414.6	415.0	414.6
135°	431.8	431.3	433.1	434.0	434.9
137.5°	449.4	449.4	451.6	452.5	452.0
140°	466.6	467.5	468.3	469.7	470.1
142.5°	482.0	483.8	484.2	485.1	485.1
145°	497.9	499.2	499.2	499.6	500.5
147.5°	510.2	512.8	512.4	512.8	513.3
150°	523.9	525.6	525.2	525.2	525.6
152.5°	535.3	536.6	535.8	536.6	536.2
155°	545.9	546.3	545.0	546.8	545.4
157.5°	555.1	555.1	553.4	555.6	553.4
160°	563.1	561.8	561.3	564.0	561.3
162.5°	570.1	568.4	567.9	570.6	567.5
165°	575.9	573.6	573.6	577.2	573.2
167.5°	580.7	578.5	578.1	582.0	577.6
170°	584.7	582.0	582.5	586.0	581.6
172.5°	587.3	584.7	585.1	588.6	583.8
175°	589.1	586.4	586.9	590.8	585.5
177.5°	590.4	587.3	588.2	591.7	586.4
180°	589.1	589.1	589.1	589.1	589.1

(END OF REPORT)