

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: P1031202

Luminaire Tested: S123RDIW-B560D460UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031202
REPORT IS A COMBINATION OF REPORTS P994528 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B560D460UB2750-4F0-XX-W2A-F_3500K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

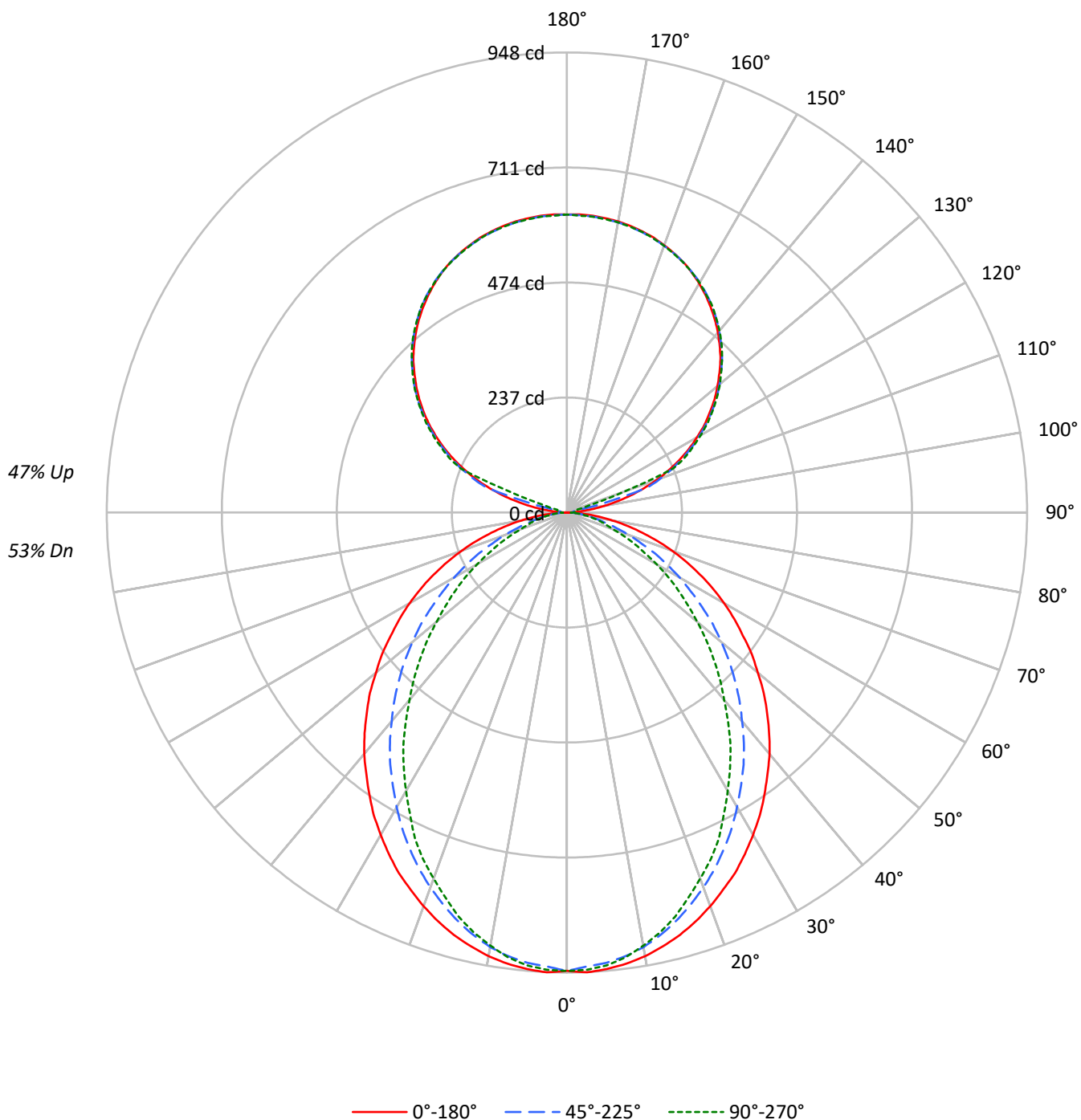
Lumens per Lamp: N/A
Luminaire Lumens: 4007.0 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1031202

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-F_3500K

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	50	30	10
RCR																				
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	59	59	59
1	99	95	91	87	91	88	85	82	75	73	71	64	62	60	53	52	51	51	51	51
2	90	83	77	72	83	77	72	68	66	62	59	56	53	51	47	45	43	43	43	43
3	83	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	37	37	37
4	76	65	57	51	70	61	54	49	52	47	43	45	41	38	38	35	32	32	32	32
5	70	58	50	44	64	54	47	42	47	42	37	40	36	33	34	31	28	28	28	28
6	64	52	44	39	59	49	42	37	43	37	33	37	32	29	31	28	25	25	25	25
7	59	47	39	34	55	44	37	32	39	33	29	33	29	26	28	25	22	22	22	22
8	55	43	35	30	51	40	33	29	35	30	26	31	26	23	26	23	20	20	20	20
9	52	39	32	27	48	37	30	26	32	27	23	28	24	21	24	21	18	18	18	18
10	48	36	29	24	45	34	28	23	30	25	21	26	22	19	22	19	17	17	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10168	10168	10168
5°	10184	9808	9781
10°	10104	9440	9253
15°	9972	8983	8675
20°	9801	8487	8028
25°	9623	7972	7415
30°	9396	7425	6691
35°	9161	6886	6032
40°	8940	6301	5303
45°	8658	5730	4648
50°	8347	5119	3970
55°	8023	4466	3349
60°	7715	3796	2718
65°	7315	3108	2122
70°	6814	2351	1516
75°	6090	1592	1201
80°	5201	1107	842
85°	3900	599	441

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8658 cd/sqm

TEST NUMBER: P1031202

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	2.2
10°-20°	247.0	6.2
20°-30°	355.7	8.9
30°-40°	400.5	10.0
40°-50°	383.1	9.6
50°-60°	313.6	7.8
60°-70°	211.5	5.3
70°-80°	106.1	2.6
80°-90°	29.0	0.7
90°-100°	21.7	0.5
100°-110°	104.7	2.6
110°-120°	256.5	6.4
120°-130°	325.6	8.1
130°-140°	347.9	8.7
140°-150°	325.3	8.1
150°-160°	262.4	6.5
160°-170°	169.3	4.2
170°-180°	58.4	1.5
0°-30°	691.5	17.3
0°-40°	1092.0	27.3
0°-60°	1788.8	44.6
0°-90°	2135.2	53.3
90°-120°	382.9	9.6
90°-150°	1381.7	34.5
90°-180°	1872.0	46.7
0°-180°	4007.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	945	941	932	938	937	90
15°	901	892	871	867	862	254
25°	820	801	765	749	741	377
35°	709	682	634	601	588	444
45°	583	548	490	446	428	450
55°	443	405	340	296	280	397
65°	303	260	201	163	155	299
75°	160	123	81	74	72	171
85°	41	24	22	20	20	44
90°	0	5	11	13	14	4
95°	28	9	14	17	17	33
105°	136	141	100	19	20	144
115°	255	258	262	266	268	252
125°	359	363	365	366	367	321
135°	448	450	452	453	452	345
145°	516	520	520	521	521	323
155°	569	568	568	571	568	262
165°	600	598	598	602	598	169
175°	614	612	612	615	612	58
180°	614	614	614	614	614	

TEST NUMBER: P1031202

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	944.6	944.6	944.6	944.6	944.6
2.5°	948.4	945.4	936.2	944.6	943.1
5°	944.6	940.8	931.6	938.5	936.9
7.5°	937.7	933.9	922.4	927.0	924.7
10°	928.5	923.1	909.4	910.1	906.3
12.5°	915.5	909.4	891.7	891.0	886.4
15°	900.9	892.5	871.0	867.2	861.9
17.5°	883.3	874.1	847.3	839.6	832.0
20°	863.4	851.1	822.0	812.1	802.9
22.5°	841.2	826.6	795.2	782.2	773.8
25°	819.7	800.6	765.3	749.2	740.8
27.5°	793.7	773.0	734.7	713.2	700.2
30°	766.9	743.9	701.0	674.9	662.7
32.5°	740.0	713.2	667.3	638.2	625.1
35°	709.4	681.8	634.3	601.4	587.6
37.5°	678.8	648.9	599.1	562.3	545.5
40°	649.6	615.9	561.5	521.7	504.1
42.5°	616.7	583.0	526.3	481.9	466.6
45°	583.0	548.5	489.5	445.9	427.5
47.5°	550.1	511.7	453.5	406.0	389.9
50°	513.3	477.3	415.2	367.7	350.1
52.5°	480.3	440.5	379.2	329.4	314.1
55°	442.8	405.3	340.1	295.7	280.4
57.5°	409.1	368.5	302.6	260.5	247.4
60°	373.9	331.7	268.1	226.8	213.7
62.5°	338.6	296.5	232.9	194.6	180.8
65°	302.6	260.5	200.7	163.2	154.8
67.5°	266.6	223.7	165.5	137.1	127.9
70°	231.4	190.0	136.4	109.6	101.1
72.5°	196.1	155.5	108.0	87.3	85.0
75°	160.1	123.3	81.2	73.5	72.0
77.5°	127.2	93.5	63.6	59.0	57.5
80°	95.8	64.4	48.3	46.0	44.4
82.5°	65.9	39.8	34.5	32.2	32.2
85°	40.6	23.7	21.5	19.9	19.9
87.5°	18.4	10.0	10.0	9.2	8.4
90°	0.5	5.0	10.9	12.8	13.7
92.5°	10.5	7.8	11.9	15.1	15.5
95°	27.8	9.1	14.1	17.3	17.3
97.5°	50.6	37.9	14.6	18.2	18.7
100°	77.1	86.2	15.1	18.7	19.2
102.5°	107.2	113.1	33.8	18.7	19.6
105°	135.9	141.0	99.9	19.2	20.1
107.5°	166.5	170.6	177.4	107.2	47.4
110°	197.1	200.7	205.7	190.7	125.4

TEST NUMBER: P1031202

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	226.3	229.4	234.5	238.6	237.7
115°	255.0	257.7	261.8	266.4	268.2
117.5°	283.3	286.5	288.7	292.4	292.8
120°	309.3	313.4	314.7	318.4	318.4
122.5°	335.7	338.9	340.7	343.0	343.5
125°	359.4	363.1	364.9	365.8	366.7
127.5°	383.2	386.8	389.1	390.5	389.6
130°	405.1	408.7	410.5	412.4	411.4
132.5°	426.0	429.7	431.1	432.9	431.5
135°	447.5	450.2	452.0	453.4	452.0
137.5°	465.7	469.4	470.3	472.6	471.7
140°	484.0	486.7	488.1	489.9	489.0
142.5°	500.9	503.6	505.0	506.3	505.0
145°	516.4	519.6	520.5	521.4	521.4
147.5°	531.4	533.7	534.6	535.5	533.2
150°	545.1	546.5	547.4	548.3	546.9
152.5°	557.4	557.9	558.3	560.2	557.9
155°	568.8	567.9	568.4	570.6	567.9
157.5°	577.9	577.9	577.5	580.2	576.6
160°	586.2	585.7	585.2	588.0	584.8
162.5°	593.9	592.5	592.1	595.3	592.5
165°	599.8	598.5	598.0	601.7	598.5
167.5°	604.9	603.0	603.0	606.7	603.0
170°	609.0	607.1	607.1	610.8	607.1
172.5°	611.7	609.4	609.9	613.5	609.4
175°	614.0	611.7	612.2	615.3	611.7
177.5°	614.9	612.6	613.1	616.7	612.2
180°	614.0	614.0	614.0	614.0	614.0

(END OF REPORT)