

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: P1032330

Luminaire Tested: S123RDIW-B560D460UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032330
REPORT IS A COMBINATION OF REPORTS P994514 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B560D460UB27-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

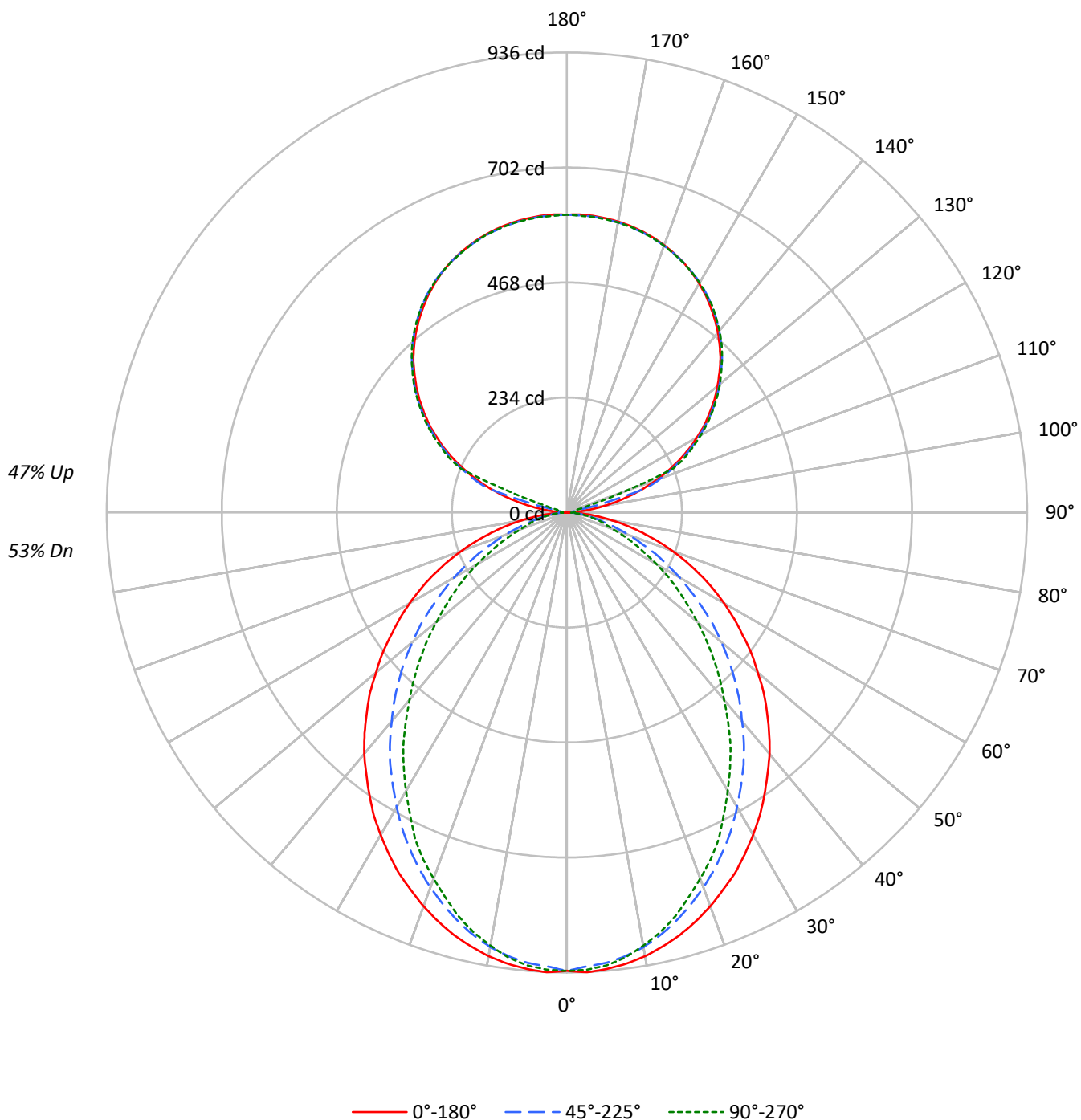
Lumens per Lamp: N/A
Luminaire Lumens: 3956.0 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1032330

CATALOG NUMBER: S123RDIW-B560D460UB27-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1032330

CATALOG NUMBER: S123RDIW-B560D460UB27-4F0-XX-W2A-F

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10038	10038	10038
5°	10055	9684	9658
10°	9977	9319	9136
15°	9846	8869	8564
20°	9677	8380	7926
25°	9501	7871	7321
30°	9277	7330	6607
35°	9045	6799	5956
40°	8827	6221	5236
45°	8548	5657	4590
50°	8241	5055	3920
55°	7922	4409	3306
60°	7616	3748	2683
65°	7223	3070	2095
70°	6726	2320	1496
75°	6014	1572	1186
80°	5130	1093	833
85°	3852	590	437

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8548 cd/sqm

TEST NUMBER: P1032330

CATALOG NUMBER: S123RDIW-B560D460UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.7	2.2
10°-20°	243.9	6.2
20°-30°	351.2	8.9
30°-40°	395.5	10.0
40°-50°	378.3	9.6
50°-60°	309.7	7.8
60°-70°	208.8	5.3
70°-80°	104.7	2.6
80°-90°	28.6	0.7
90°-100°	21.4	0.5
100°-110°	103.3	2.6
110°-120°	253.2	6.4
120°-130°	321.5	8.1
130°-140°	343.4	8.7
140°-150°	321.1	8.1
150°-160°	259.0	6.5
160°-170°	167.2	4.2
170°-180°	57.6	1.5
0°-30°	682.7	17.3
0°-40°	1078.2	27.3
0°-60°	1766.1	44.6
0°-90°	2108.2	53.3
90°-120°	378.0	9.6
90°-150°	1364.0	34.5
90°-180°	1848.0	46.7
0°-180°	3956.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	933	929	920	927	925	88
15°	890	881	860	856	851	251
25°	809	790	756	740	731	372
35°	700	673	626	594	580	438
45°	576	542	483	440	422	444
55°	437	400	336	292	277	392
65°	299	257	198	161	153	296
75°	158	122	80	73	71	168
85°	40	23	21	20	20	44
90°	0	5	11	13	14	4
95°	28	9	14	17	17	33
105°	134	139	99	19	20	142
115°	252	254	258	263	265	249
125°	355	358	360	361	362	317
135°	442	444	446	448	446	340
145°	510	513	514	515	515	319
155°	562	561	561	563	561	259
165°	592	591	590	594	591	167
175°	606	604	604	608	604	58
180°	606	606	606	606	606	

TEST NUMBER: P1032330

CATALOG NUMBER: S123RDIW-B560D460UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	932.6	932.6	932.6	932.6	932.6
2.5°	936.4	933.4	924.3	932.6	931.1
5°	932.6	928.9	919.8	926.6	925.1
7.5°	925.8	922.1	910.7	915.2	913.0
10°	916.8	911.5	897.8	898.6	894.8
12.5°	903.9	897.8	880.4	879.7	875.2
15°	889.5	881.2	860.0	856.2	850.9
17.5°	872.1	863.1	836.6	829.0	821.4
20°	852.5	840.4	811.6	801.8	792.7
22.5°	830.5	816.2	785.1	772.3	764.0
25°	809.3	790.4	755.6	739.8	731.4
27.5°	783.6	763.2	725.4	704.2	691.3
30°	757.2	734.5	692.1	666.4	654.3
32.5°	730.7	704.2	658.8	630.1	617.2
35°	700.4	673.2	626.3	593.8	580.2
37.5°	670.2	640.7	591.5	555.2	538.6
40°	641.4	608.1	554.4	515.1	497.7
42.5°	608.9	575.6	519.6	475.8	460.6
45°	575.6	541.6	483.3	440.2	422.1
47.5°	543.1	505.3	447.8	400.9	385.0
50°	506.8	471.2	410.0	363.1	345.7
52.5°	474.3	434.9	374.4	325.3	310.1
55°	437.2	400.1	335.8	292.0	276.8
57.5°	403.9	363.8	298.8	257.2	244.3
60°	369.1	327.5	264.7	223.9	211.0
62.5°	334.3	292.7	229.9	192.1	178.5
65°	298.8	257.2	198.2	161.1	152.8
67.5°	263.2	220.9	163.4	135.4	126.3
70°	228.4	187.6	134.6	108.2	99.8
72.5°	193.6	153.5	106.7	86.2	84.0
75°	158.1	121.8	80.2	72.6	71.1
77.5°	125.6	92.3	62.8	58.2	56.7
80°	94.5	63.5	47.7	45.4	43.9
82.5°	65.1	39.3	34.0	31.8	31.8
85°	40.1	23.4	21.2	19.7	19.7
87.5°	18.2	9.8	9.8	9.1	8.3
90°	0.5	5.0	10.8	12.6	13.5
92.5°	10.4	7.7	11.7	14.9	15.3
95°	27.5	9.0	14.0	17.1	17.1
97.5°	50.0	37.4	14.4	18.0	18.5
100°	76.1	85.1	14.9	18.5	18.9
102.5°	105.8	111.7	33.3	18.5	19.4
105°	134.2	139.1	98.6	18.9	19.8
107.5°	164.4	168.4	175.2	105.8	46.8
110°	194.5	198.1	203.1	188.2	123.8



TEST NUMBER: P1032330

CATALOG NUMBER: S123RDIW-B560D460UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	226.5	231.5	235.5	234.6
115°	251.7	254.4	258.5	263.0	264.8
117.5°	279.6	282.8	285.0	288.6	289.1
120°	305.3	309.4	310.7	314.3	314.3
122.5°	331.4	334.6	336.4	338.6	339.1
125°	354.8	358.4	360.2	361.1	362.0
127.5°	378.3	381.9	384.1	385.5	384.6
130°	399.9	403.5	405.3	407.1	406.2
132.5°	420.6	424.2	425.5	427.3	426.0
135°	441.8	444.5	446.3	447.6	446.3
137.5°	459.8	463.4	464.3	466.5	465.6
140°	477.8	480.5	481.8	483.6	482.7
142.5°	494.4	497.1	498.5	499.8	498.5
145°	509.7	512.9	513.8	514.7	514.7
147.5°	524.6	526.9	527.8	528.7	526.4
150°	538.1	539.5	540.4	541.3	539.9
152.5°	550.3	550.7	551.2	553.0	550.7
155°	561.5	560.6	561.1	563.3	560.6
157.5°	570.5	570.5	570.1	572.8	569.2
160°	578.6	578.2	577.7	580.4	577.3
162.5°	586.3	584.9	584.5	587.7	584.9
165°	592.2	590.8	590.4	594.0	590.8
167.5°	597.1	595.3	595.3	598.9	595.3
170°	601.2	599.4	599.4	603.0	599.4
172.5°	603.9	601.6	602.1	605.7	601.6
175°	606.1	603.9	604.3	607.5	603.9
177.5°	607.0	604.8	605.2	608.8	604.3
180°	606.1	606.1	606.1	606.1	606.1

(END OF REPORT)