

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: P1032342

Luminaire Tested: S123RDIW-B560D460UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032342
REPORT IS A COMBINATION OF REPORTS P994546 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B560D460UB40-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

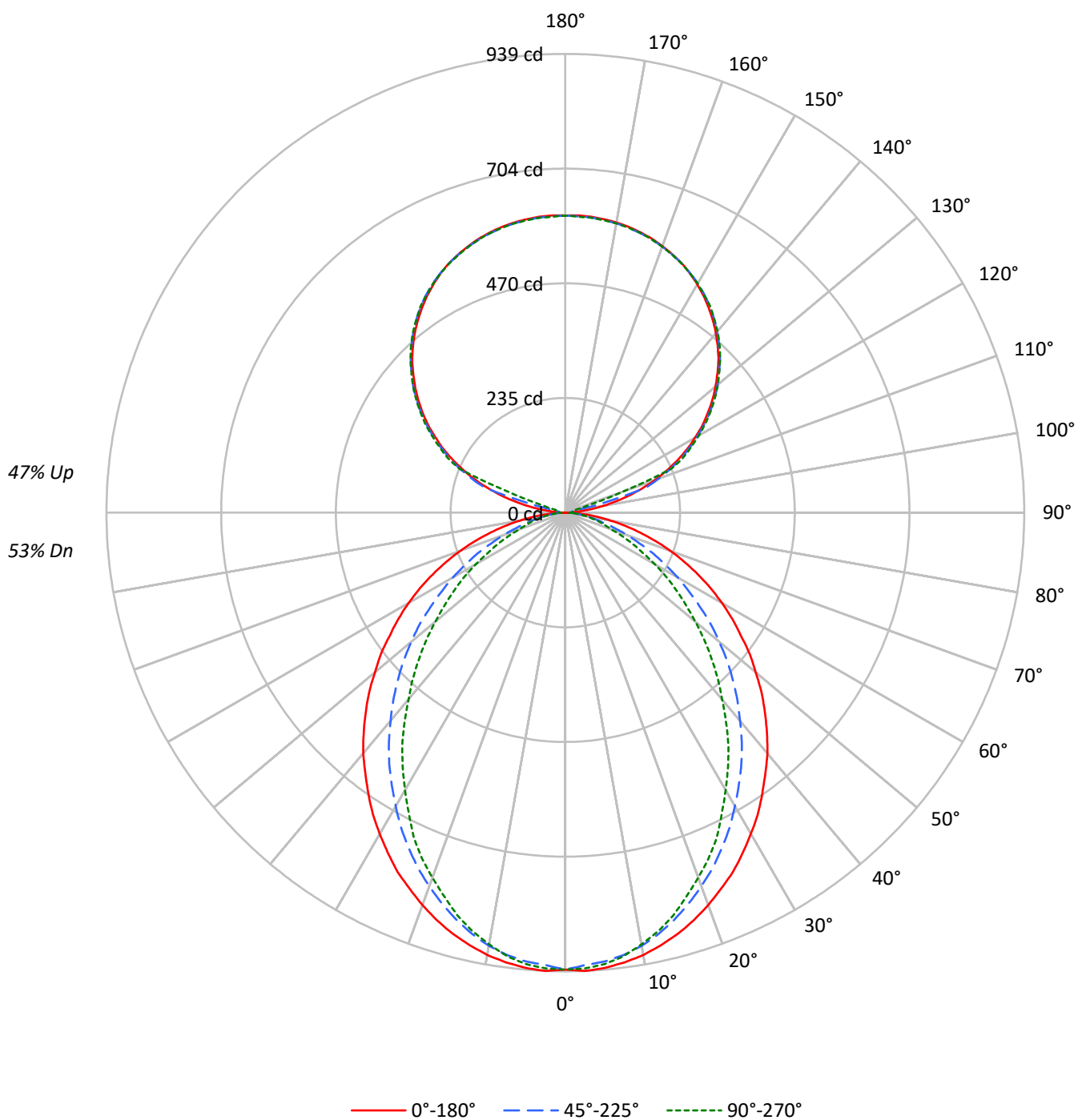
Lumens per Lamp: N/A
Luminaire Lumens: 3968.0 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	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°	10067	10067	10067
5°	10084	9711	9685
10°	10005	9346	9162
15°	9875	8895	8589
20°	9704	8404	7949
25°	9529	7894	7342
30°	9303	7352	6625
35°	9071	6819	5972
40°	8853	6239	5251
45°	8574	5673	4603
50°	8264	5069	3932
55°	7944	4422	3316
60°	7639	3759	2691
65°	7242	3077	2100
70°	6747	2327	1501
75°	6029	1576	1190
80°	5147	1096	834
85°	3861	590	437

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8574 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.9	2.2
10°-20°	244.6	6.2
20°-30°	352.2	8.9
30°-40°	396.6	10.0
40°-50°	379.4	9.6
50°-60°	310.5	7.8
60°-70°	209.4	5.3
70°-80°	105.0	2.6
80°-90°	28.7	0.7
90°-100°	21.4	0.5
100°-110°	103.7	2.6
110°-120°	254.0	6.4
120°-130°	322.5	8.1
130°-140°	344.5	8.7
140°-150°	322.2	8.1
150°-160°	259.9	6.5
160°-170°	167.7	4.2
170°-180°	57.8	1.5
0°-30°	684.7	17.3
0°-40°	1081.3	27.3
0°-60°	1771.2	44.6
0°-90°	2114.2	53.3
90°-120°	379.2	9.6
90°-150°	1368.4	34.5
90°-180°	1854.0	46.7
0°-180°	3968.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	935	932	922	929	928	89
15°	892	884	862	859	853	251
25°	812	793	758	742	734	373
35°	702	675	628	596	582	440
45°	577	543	485	442	423	445
55°	438	401	337	293	278	393
65°	300	258	199	162	153	297
75°	158	122	80	73	71	169
85°	40	24	21	20	20	44
90°	0	5	11	13	14	4
95°	28	9	14	17	17	33
105°	135	140	99	19	20	143
115°	252	255	259	264	266	249
125°	356	360	361	362	363	318
135°	443	446	448	449	448	341
145°	511	515	516	516	516	320
155°	563	562	563	565	562	260
165°	594	593	592	596	593	168
175°	608	606	606	609	606	58
180°	608	608	608	608	608	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	935.3	935.3	935.3	935.3	935.3
2.5°	939.1	936.1	927.0	935.3	933.8
5°	935.3	931.5	922.4	929.2	927.7
7.5°	928.5	924.7	913.3	917.8	915.6
10°	919.4	914.1	900.4	901.2	897.4
12.5°	906.5	900.4	883.0	882.2	877.6
15°	892.1	883.7	862.5	858.7	853.4
17.5°	874.6	865.5	839.0	831.4	823.8
20°	854.9	842.8	813.9	804.1	795.0
22.5°	832.9	818.5	787.4	774.5	766.1
25°	811.7	792.7	757.8	741.9	733.5
27.5°	785.9	765.4	727.5	706.2	693.3
30°	759.3	736.6	694.1	668.3	656.1
32.5°	732.8	706.2	660.7	631.9	619.0
35°	702.4	675.1	628.1	595.5	581.8
37.5°	672.1	642.5	593.2	556.8	540.1
40°	643.3	609.9	556.0	516.6	499.1
42.5°	610.6	577.3	521.1	477.1	462.0
45°	577.3	543.1	484.7	441.5	423.3
47.5°	544.6	506.7	449.1	402.0	386.1
50°	508.2	472.6	411.1	364.1	346.7
52.5°	475.6	436.2	375.5	326.2	311.0
55°	438.4	401.3	336.8	292.8	277.6
57.5°	405.1	364.9	299.6	257.9	245.0
60°	370.2	328.5	265.5	224.5	211.6
62.5°	335.3	293.6	230.6	192.7	179.0
65°	299.6	257.9	198.7	161.6	153.2
67.5°	264.0	221.5	163.8	135.8	126.7
70°	229.1	188.1	135.0	108.5	100.1
72.5°	194.2	154.0	107.0	86.5	84.2
75°	158.5	122.1	80.4	72.8	71.3
77.5°	125.9	92.5	63.0	58.4	56.9
80°	94.8	63.7	47.8	45.5	44.0
82.5°	65.2	39.4	34.1	31.9	31.9
85°	40.2	23.5	21.2	19.7	19.7
87.5°	18.2	9.9	9.9	9.1	8.3
90°	0.5	5.0	10.8	12.6	13.6
92.5°	10.4	7.7	11.7	14.9	15.4
95°	27.6	9.0	14.0	17.2	17.2
97.5°	50.1	37.5	14.5	18.1	18.5
100°	76.3	85.4	14.9	18.5	19.0
102.5°	106.2	112.0	33.4	18.5	19.4
105°	134.6	139.6	98.9	19.0	19.9
107.5°	164.9	169.0	175.7	106.2	47.0
110°	195.2	198.8	203.7	188.8	124.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	224.1	227.2	232.2	236.3	235.4
115°	252.5	255.2	259.3	263.8	265.6
117.5°	280.5	283.7	286.0	289.6	290.0
120°	306.3	310.4	311.7	315.3	315.3
122.5°	332.5	335.7	337.5	339.7	340.2
125°	356.0	359.6	361.4	362.3	363.2
127.5°	379.5	383.1	385.4	386.7	385.8
130°	401.2	404.8	406.6	408.4	407.5
132.5°	422.0	425.6	426.9	428.7	427.4
135°	443.2	445.9	447.7	449.1	447.7
137.5°	461.3	464.9	465.8	468.0	467.1
140°	479.3	482.0	483.4	485.2	484.3
142.5°	496.0	498.8	500.1	501.5	500.1
145°	511.4	514.6	515.5	516.4	516.4
147.5°	526.3	528.6	529.5	530.4	528.1
150°	539.9	541.2	542.1	543.0	541.7
152.5°	552.1	552.5	553.0	554.8	552.5
155°	563.4	562.5	562.9	565.2	562.5
157.5°	572.4	572.4	571.9	574.6	571.0
160°	580.5	580.1	579.6	582.3	579.2
162.5°	588.2	586.8	586.4	589.6	586.8
165°	594.1	592.7	592.3	595.9	592.7
167.5°	599.0	597.2	597.2	600.9	597.2
170°	603.1	601.3	601.3	604.9	601.3
172.5°	605.8	603.6	604.0	607.6	603.6
175°	608.1	605.8	606.3	609.4	605.8
177.5°	609.0	606.7	607.2	610.8	606.3
180°	608.1	608.1	608.1	608.1	608.1

(END OF REPORT)