

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: P1031794

Luminaire Tested: S123DIW-B560D460UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031794
REPORT IS A COMBINATION OF REPORTS P991749 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D460UB35-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

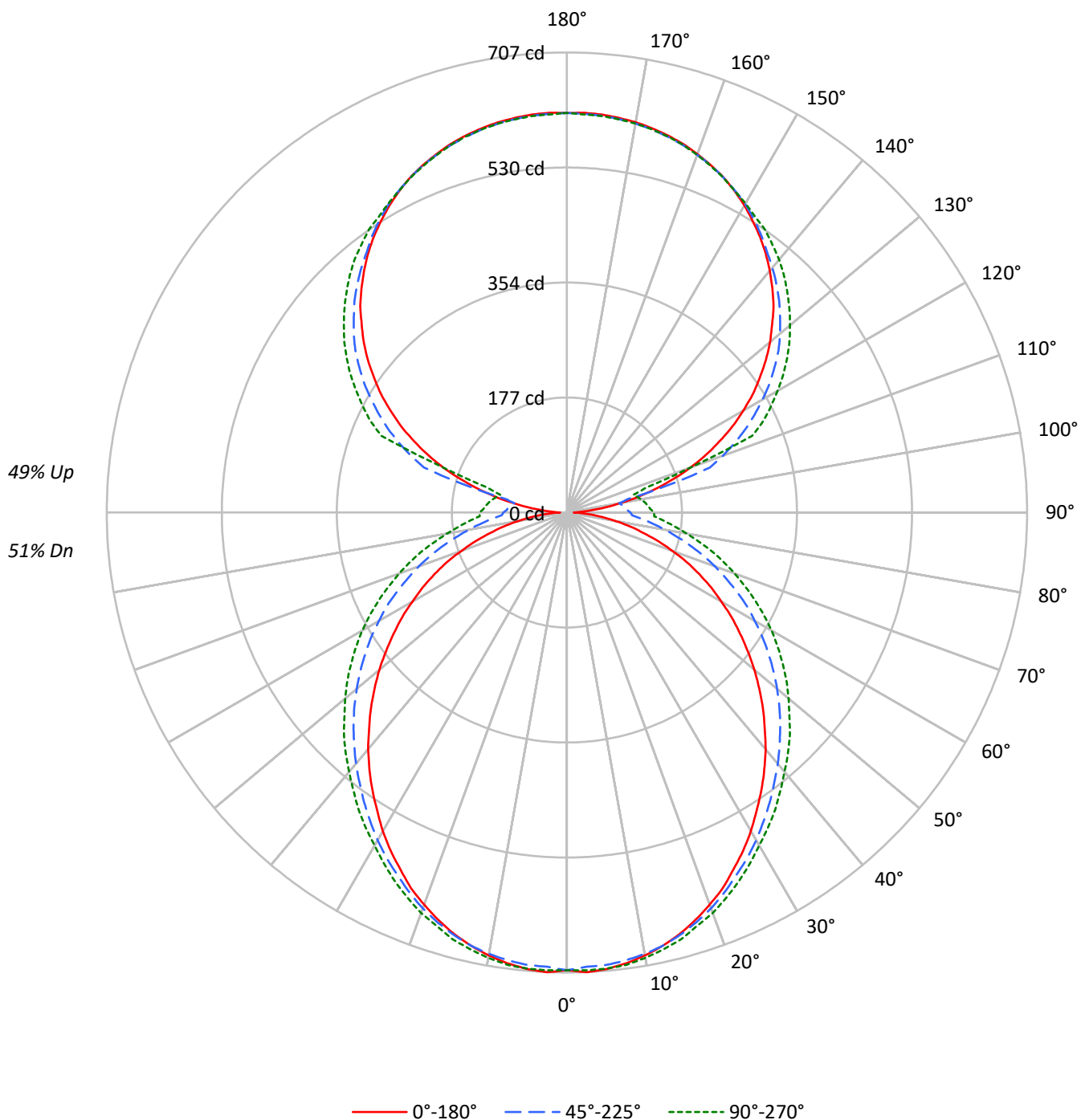
Lumens per Lamp: N/A
Luminaire Lumens: 4237.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	97	92	88	84	89	85	81	78	72	69	67	60	58	56	49	47	46
2	88	80	73	68	81	74	68	63	62	58	54	52	49	46	42	40	38
3	80	70	62	56	73	65	58	52	55	50	45	46	42	38	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	33	33	30	27
5	67	55	46	40	61	51	43	38	43	37	33	36	32	28	30	26	24
6	62	49	41	35	56	46	38	33	39	33	28	33	28	25	27	23	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	24	21	18
8	53	40	32	27	48	37	30	25	32	26	22	27	23	19	22	19	16
9	49	37	29	24	45	34	27	22	29	24	20	25	20	17	21	17	15
10	46	33	26	21	42	31	25	20	27	22	18	23	19	16	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7571	7571	7571
5°	7592	7349	7343
10°	7521	7150	7096
15°	7422	6930	6833
20°	7280	6686	6550
25°	7106	6410	6259
30°	6929	6160	5965
35°	6728	5898	5726
40°	6539	5658	5474
45°	6327	5426	5266
50°	6117	5196	5039
55°	5887	4961	4832
60°	5660	4719	4619
65°	5427	4462	4371
70°	5077	4173	4113
75°	4633	3846	3847
80°	4121	3512	3546
85°	3602	3244	3329

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6327 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	1.6
10°-20°	190.2	4.5
20°-30°	284.5	6.7
30°-40°	339.6	8.0
40°-50°	355.4	8.4
50°-60°	333.5	7.9
60°-70°	278.5	6.6
70°-80°	199.2	4.7
80°-90°	119.7	2.8
90°-100°	96.1	2.3
100°-110°	159.4	3.8
110°-120°	293.1	6.9
120°-130°	346.5	8.2
130°-140°	357.2	8.4
140°-150°	327.3	7.7
150°-160°	262.4	6.2
160°-170°	169.3	4.0
170°-180°	58.4	1.4
0°-30°	541.4	12.8
0°-40°	881.0	20.8
0°-60°	1569.9	37.1
0°-90°	2167.3	51.2
90°-120°	548.6	12.9
90°-150°	1579.6	37.3
90°-180°	2070.0	48.9
0°-180°	4237.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	704	703	698	704	703	67
15°	670	673	672	680	679	189
25°	605	613	615	625	625	279
35°	521	533	543	555	558	326
45°	426	444	464	478	484	329
55°	325	350	378	398	405	291
65°	224	254	288	311	319	222
75°	122	158	196	221	231	130
85°	38	76	116	142	150	39
90°	10	52	98	125	134	9
95°	36	47	90	117	125	40
105°	142	166	157	98	106	150
115°	259	271	302	325	333	256
125°	362	365	389	406	413	323
135°	449	451	461	476	479	346
145°	517	520	520	528	531	324
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	703.4	703.4	703.4	703.4	703.4
2.5°	707.2	704.9	698.8	704.9	704.2
5°	704.2	702.6	698.0	704.2	703.4
7.5°	698.8	698.8	694.2	701.9	701.1
10°	691.1	692.7	688.8	696.5	695.0
12.5°	682.0	684.3	682.0	688.8	687.3
15°	670.5	672.8	672.0	679.7	678.9
17.5°	656.7	661.3	660.5	667.4	665.9
20°	641.3	645.9	647.5	654.4	655.1
22.5°	625.3	629.8	632.1	641.3	640.6
25°	605.3	613.0	615.3	625.3	625.3
27.5°	586.2	594.6	599.2	607.6	608.4
30°	565.5	575.4	581.6	590.8	590.8
32.5°	542.5	554.0	562.4	572.4	574.7
35°	521.0	533.3	543.3	554.8	557.8
37.5°	498.1	511.8	523.3	536.4	538.7
40°	475.1	488.9	504.2	517.2	520.3
42.5°	449.8	467.4	483.5	498.1	502.7
45°	426.0	444.4	463.6	478.1	484.3
47.5°	400.7	421.4	442.9	459.0	463.6
50°	376.2	397.7	421.4	439.1	444.4
52.5°	350.2	373.2	400.0	418.4	425.3
55°	324.9	350.2	377.8	398.4	404.6
57.5°	300.4	326.4	356.3	377.0	383.9
60°	274.3	301.9	333.3	354.8	363.2
62.5°	249.8	278.1	311.9	333.3	341.0
65°	224.5	254.4	288.1	311.1	318.8
67.5°	199.2	230.6	264.4	289.6	295.8
70°	172.4	205.4	242.1	266.7	274.3
72.5°	147.9	180.8	219.1	244.4	252.1
75°	121.8	157.8	196.2	221.4	230.6
77.5°	99.6	135.6	173.9	200.8	207.7
80°	75.9	113.4	153.2	179.3	187.0
82.5°	55.2	93.5	134.1	160.1	167.8
85°	37.5	75.9	116.5	142.5	150.2
87.5°	23.0	61.3	100.4	126.4	134.1
90°	10.5	52.5	97.5	125.4	134.0
92.5°	19.7	49.9	92.4	120.8	128.1
95°	36.2	47.4	90.0	116.9	124.6
97.5°	58.3	73.1	85.9	112.4	120.6
100°	84.0	117.6	81.8	107.6	115.7
102.5°	113.3	140.7	95.9	102.2	110.8
105°	142.0	165.5	157.4	98.1	105.9
107.5°	171.9	192.1	230.3	180.8	127.9
110°	201.7	219.1	254.7	259.7	200.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	230.9	244.7	278.9	302.2	308.2
115°	258.8	270.7	302.4	325.4	333.3
117.5°	287.1	296.5	324.7	346.8	353.3
120°	312.4	320.3	346.9	368.2	373.6
122.5°	338.8	343.5	369.1	388.2	394.1
125°	361.7	365.4	389.4	406.4	412.7
127.5°	385.5	388.3	409.8	426.5	431.0
130°	407.4	410.2	427.4	443.8	447.4
132.5°	427.5	431.2	444.1	459.7	463.7
135°	449.0	451.0	461.2	476.4	478.8
137.5°	467.2	470.2	476.4	491.0	493.9
140°	484.8	487.5	491.2	504.5	507.4
142.5°	501.7	503.6	505.0	516.3	518.8
145°	517.2	519.6	520.5	527.5	530.6
147.5°	531.4	533.7	534.6	537.8	538.6
150°	545.1	546.5	547.4	548.3	548.4
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)