

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: P1031795

Luminaire Tested: S123DIW-B560D460UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031795
REPORT IS A COMBINATION OF REPORTS P991750 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D460UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

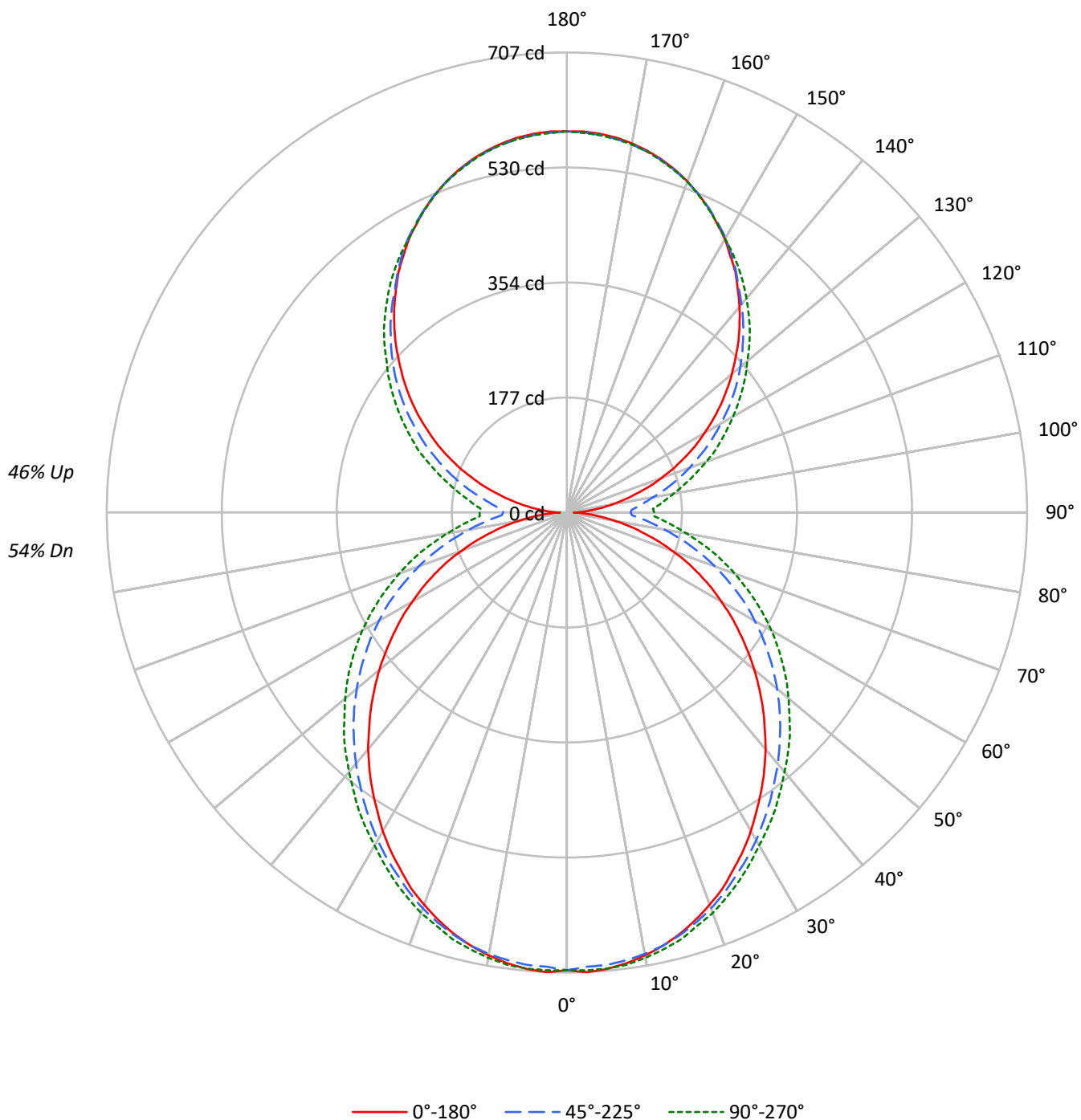
Lumens per Lamp: N/A
Luminaire Lumens: 3988.0 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60
1	98	93	88	84	90	86	82	79	73	71	68	62	60	58	51	50	48
2	88	80	74	68	82	75	69	64	64	59	55	54	50	48	45	42	40
3	80	70	62	56	74	65	58	53	56	51	46	47	43	40	39	36	34
4	73	62	54	47	68	58	50	44	49	44	39	42	37	34	35	31	29
5	67	55	47	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	41	35	57	46	38	33	40	34	29	34	29	25	28	25	22
7	57	44	36	30	53	42	34	29	36	30	26	31	26	22	26	22	19
8	53	40	32	27	49	38	30	25	33	27	23	28	23	20	24	20	17
9	49	37	29	24	46	34	27	23	30	24	20	26	21	18	22	18	15
10	46	34	26	21	43	32	25	20	28	22	18	24	19	16	20	17	14

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	1.7
10°-20°	190.2	4.8
20°-30°	284.5	7.1
30°-40°	339.6	8.5
40°-50°	355.4	8.9
50°-60°	333.5	8.4
60°-70°	278.5	7.0
70°-80°	199.2	5.0
80°-90°	119.7	3.0
90°-100°	112.2	2.8
100°-110°	168.9	4.2
110°-120°	230.8	5.8
120°-130°	276.4	6.9
130°-140°	296.6	7.4
140°-150°	284.4	7.1
150°-160°	237.8	6.0
160°-170°	158.3	4.0
170°-180°	55.4	1.4
0°-30°	541.4	13.6
0°-40°	881.0	22.1
0°-60°	1569.9	39.4
0°-90°	2167.3	54.3
90°-120°	511.8	12.8
90°-150°	1369.2	34.3
90°-180°	1821.0	45.7
0°-180°	3988.0	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	53	98	126	134	9
95°	36	69	110	136	143	36
105°	110	129	166	188	195	117
115°	199	210	237	255	261	197
125°	288	290	311	325	329	258
135°	373	375	383	395	398	287
145°	451	451	453	458	460	282
155°	516	516	516	518	515	237
165°	562	560	560	563	560	158
175°	584	582	582	585	582	56
180°	586	586	586	586	586	

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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	52.6	97.6	125.5	134.1
92.5°	23.0	58.7	99.8	126.4	132.4
95°	35.5	68.7	109.9	135.5	143.2
97.5°	52.3	82.1	121.0	146.2	153.4
100°	69.5	96.7	134.3	157.9	166.4
102.5°	89.4	112.3	150.0	172.8	180.0
105°	109.6	128.9	166.1	187.5	195.3
107.5°	132.8	149.4	182.6	204.7	211.2
110°	154.1	168.8	200.4	222.2	227.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.1	188.3	217.4	238.9	245.8
115°	199.3	209.9	236.6	255.4	261.1
117.5°	222.8	229.5	254.5	272.9	277.7
120°	243.7	250.3	273.3	290.4	294.9
122.5°	266.3	269.6	292.5	307.9	311.9
125°	288.5	289.8	311.1	325.4	328.9
127.5°	309.6	311.6	329.9	342.4	346.0
130°	330.8	333.7	347.7	360.3	361.7
132.5°	351.1	354.8	365.4	376.9	380.0
135°	372.8	374.8	382.8	394.7	397.6
137.5°	392.6	394.2	400.8	410.8	413.3
140°	412.6	414.9	417.6	428.7	429.2
142.5°	431.4	432.9	433.8	443.4	444.9
145°	451.2	451.3	452.7	458.3	459.6
147.5°	467.4	469.3	470.6	472.9	473.3
150°	485.4	486.3	487.2	487.2	485.9
152.5°	500.1	501.5	501.9	502.9	500.5
155°	515.7	515.7	516.2	518.0	514.8
157.5°	529.1	528.6	529.1	530.9	528.2
160°	541.5	540.6	540.6	542.9	541.0
162.5°	552.5	551.2	551.6	553.9	550.7
165°	561.7	560.4	560.4	563.1	559.9
167.5°	569.6	567.7	568.2	570.9	568.2
170°	576.0	574.2	574.2	577.4	574.2
172.5°	581.1	579.2	579.2	582.0	578.8
175°	584.3	582.4	582.4	585.2	582.0
177.5°	586.1	584.3	584.3	587.0	583.8
180°	585.7	585.7	585.7	585.7	585.7

(END OF REPORT)