

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: P1031791

Luminaire Tested: S123DIW-B560D460UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031791
REPORT IS A COMBINATION OF REPORTS P991744 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D460UB30-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

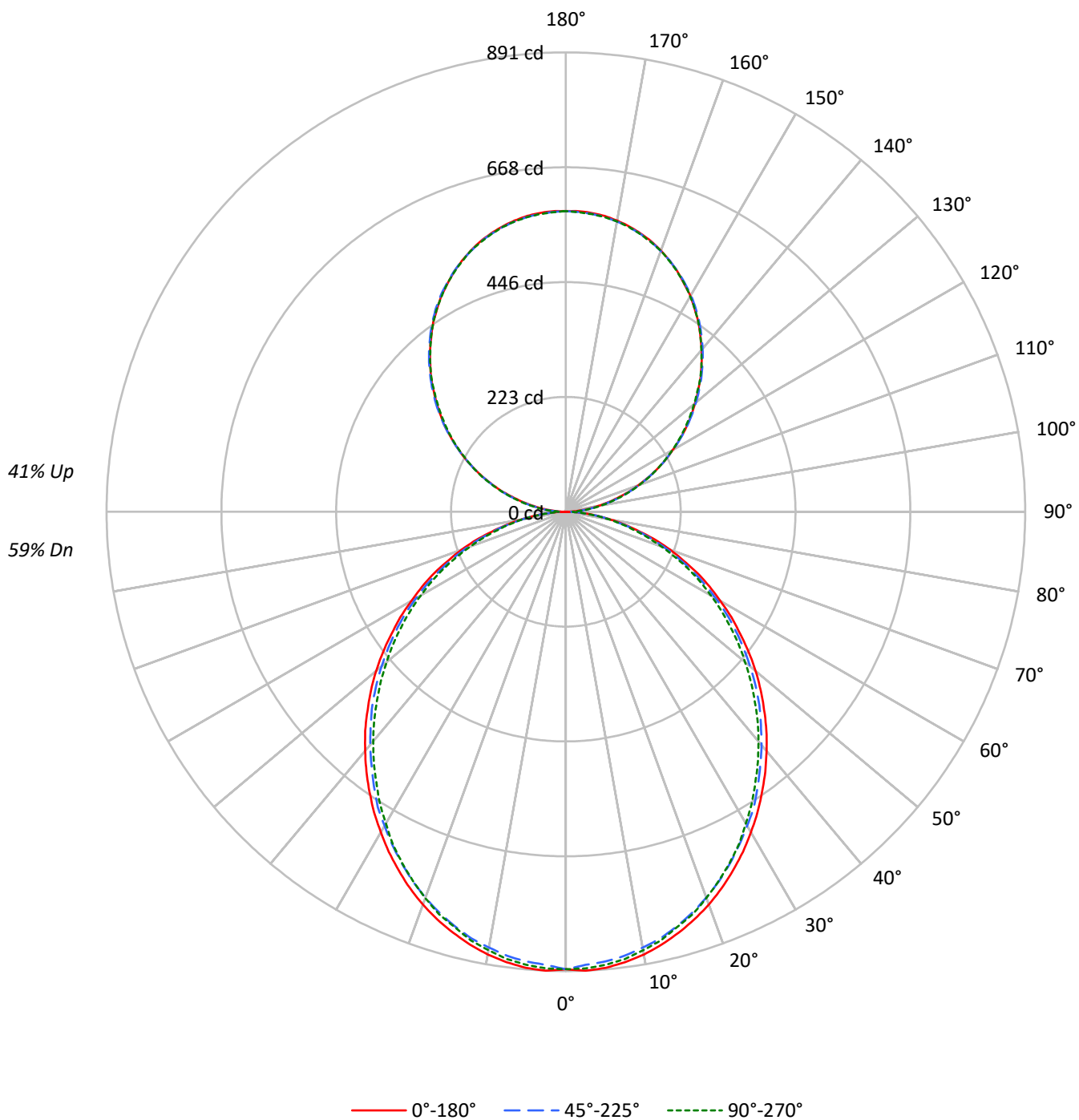
Lumens per Lamp: N/A
Luminaire Lumens: 3926.0 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	100	95	91	88	93	89	86	82	77	75	72	67	65	63	57	55	54
2	91	83	77	72	84	78	72	68	68	64	60	58	55	53	50	48	46
3	83	73	66	60	77	68	62	57	60	55	50	52	48	44	44	41	39
4	76	65	57	50	70	61	53	48	53	47	43	46	42	38	39	36	33
5	70	58	49	43	65	54	47	41	48	42	37	41	37	33	36	32	29
6	64	52	44	38	60	49	41	36	43	37	32	37	33	29	32	29	26
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	29	26	23
8	55	43	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18
10	48	36	28	23	45	34	27	23	30	24	21	27	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9550	9550	9550
5°	9574	9221	9207
10°	9488	8908	8817
15°	9356	8584	8392
20°	9205	8223	7971
25°	9009	7843	7521
30°	8795	7450	7048
35°	8571	7048	6578
40°	8336	6626	6115
45°	8078	6214	5632
50°	7815	5757	5147
55°	7478	5279	4656
60°	7131	4753	4133
65°	6805	4183	3588
70°	6334	3551	2951
75°	5660	2811	2291
80°	4886	1976	1620
85°	3813	1061	811

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8078 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	2.1
10°-20°	236.2	6.0
20°-30°	348.8	8.9
30°-40°	407.4	10.4
40°-50°	409.5	10.4
50°-60°	359.8	9.2
60°-70°	267.9	6.8
70°-80°	152.5	3.9
80°-90°	44.6	1.1
90°-100°	37.5	1.0
100°-110°	113.6	2.9
110°-120°	193.4	4.9
120°-130°	254.5	6.5
130°-140°	286.0	7.3
140°-150°	281.2	7.2
150°-160°	236.7	6.0
160°-170°	157.6	4.0
170°-180°	55.2	1.4
0°-30°	668.6	17.0
0°-40°	1076.0	27.4
0°-60°	1845.2	47.0
0°-90°	2310.2	58.8
90°-120°	344.6	8.8
90°-150°	1166.2	29.7
90°-180°	1616.0	41.2
0°-180°	3926.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	887	887	887	887	887	
5°	888	884	876	883	882	84
15°	845	842	832	838	834	238
25°	767	763	753	754	751	354
35°	664	659	649	645	641	415
45°	544	541	531	522	518	420
55°	413	412	402	394	390	370
65°	282	278	270	264	262	278
75°	149	146	143	140	137	159
85°	40	38	38	37	37	43
90°	0	5	11	13	14	5
95°	27	30	34	36	36	30
105°	103	104	108	108	109	110
115°	195	196	195	196	195	193
125°	285	286	285	284	282	254
135°	370	372	372	370	369	285
145°	448	449	451	450	448	280
155°	514	514	514	516	513	236
165°	559	558	558	561	558	158
175°	582	580	580	583	580	55
180°	583	583	583	583	583	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	887.2	887.2	887.2	887.2	887.2
2.5°	891.0	888.0	879.6	887.2	886.4
5°	888.0	884.2	875.8	883.4	881.9
7.5°	881.1	877.3	868.9	875.8	875.0
10°	871.9	868.1	858.2	865.1	863.6
12.5°	859.7	856.7	847.5	852.1	851.4
15°	845.2	842.2	832.3	838.4	833.8
17.5°	829.2	825.4	815.5	820.1	818.5
20°	810.9	806.3	796.4	799.5	797.2
22.5°	790.3	785.7	775.8	778.1	775.1
25°	767.4	762.9	752.9	753.7	751.4
27.5°	743.8	739.2	728.5	729.3	727.0
30°	717.8	714.0	703.4	703.4	698.0
32.5°	691.9	686.6	678.9	673.6	671.3
35°	663.7	659.1	649.2	644.6	640.8
37.5°	635.5	629.4	619.4	614.1	611.8
40°	605.7	601.1	590.5	584.3	581.3
42.5°	576.0	570.6	559.9	553.8	550.8
45°	543.9	540.9	530.9	521.8	518.0
47.5°	512.6	508.1	498.9	489.8	486.7
50°	480.6	476.8	466.9	458.5	453.9
52.5°	447.0	444.7	434.1	427.2	422.6
55°	412.7	411.9	402.0	393.6	389.8
57.5°	380.7	377.6	370.0	362.4	357.8
60°	345.6	344.8	335.7	328.8	325.0
62.5°	314.3	312.0	302.9	296.0	293.7
65°	281.5	277.7	270.1	263.9	261.7
67.5°	246.4	243.4	237.2	231.9	228.9
70°	215.1	210.5	206.0	200.6	196.8
72.5°	182.3	179.3	173.9	169.4	167.8
75°	148.8	145.7	143.4	139.6	137.3
77.5°	119.0	117.5	114.4	111.4	111.4
80°	90.0	87.7	86.2	85.4	85.4
82.5°	61.8	61.8	61.8	60.3	59.5
85°	39.7	38.1	38.1	36.6	36.6
87.5°	19.8	17.5	16.8	16.0	16.0
90°	0.5	5.0	11.0	12.8	13.7
92.5°	13.7	16.5	19.2	20.6	19.7
95°	27.0	30.2	33.9	35.7	35.7
97.5°	44.4	46.7	49.5	51.8	51.3
100°	62.3	65.0	67.3	68.7	69.6
102.5°	82.9	84.3	87.5	88.9	88.4
105°	103.1	104.0	108.1	108.1	109.0
107.5°	126.9	127.3	129.2	130.6	130.1
110°	148.9	149.8	150.7	152.5	151.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	171.8	172.2	172.2	174.5	174.5
115°	194.7	196.1	195.1	195.6	195.1
117.5°	218.0	218.5	217.6	217.6	216.2
120°	239.6	242.3	240.0	239.6	238.7
122.5°	262.0	263.9	262.9	261.6	260.2
125°	284.9	286.3	285.4	283.6	281.7
127.5°	306.0	308.7	307.8	305.1	303.2
130°	327.1	330.7	329.4	327.5	324.3
132.5°	348.1	351.8	350.9	348.6	346.3
135°	369.7	372.4	372.0	370.1	369.2
137.5°	389.4	391.7	393.0	390.7	389.4
140°	410.0	412.3	412.7	412.3	409.1
142.5°	428.8	431.1	432.0	431.5	429.2
145°	448.5	449.4	450.8	450.3	448.5
147.5°	465.4	467.2	468.6	468.6	465.9
150°	483.3	484.2	485.1	485.1	482.4
152.5°	497.9	499.3	499.8	500.7	498.4
155°	513.5	513.5	514.0	515.8	512.6
157.5°	526.8	526.3	526.8	528.6	525.9
160°	539.2	538.2	538.2	540.5	538.7
162.5°	550.2	548.8	549.2	551.5	548.3
165°	559.3	557.9	557.9	560.7	557.5
167.5°	567.1	565.3	565.7	568.5	565.7
170°	573.5	571.7	571.7	574.9	571.7
172.5°	578.6	576.7	576.7	579.5	576.3
175°	581.8	579.9	579.9	582.7	579.5
177.5°	583.6	581.8	581.8	584.5	581.3
180°	583.1	583.1	583.1	583.1	583.1

(END OF REPORT)