

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: P1031797

Luminaire Tested: S123DIW-B560D460UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031797
REPORT IS A COMBINATION OF REPORTS P991753 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-F1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

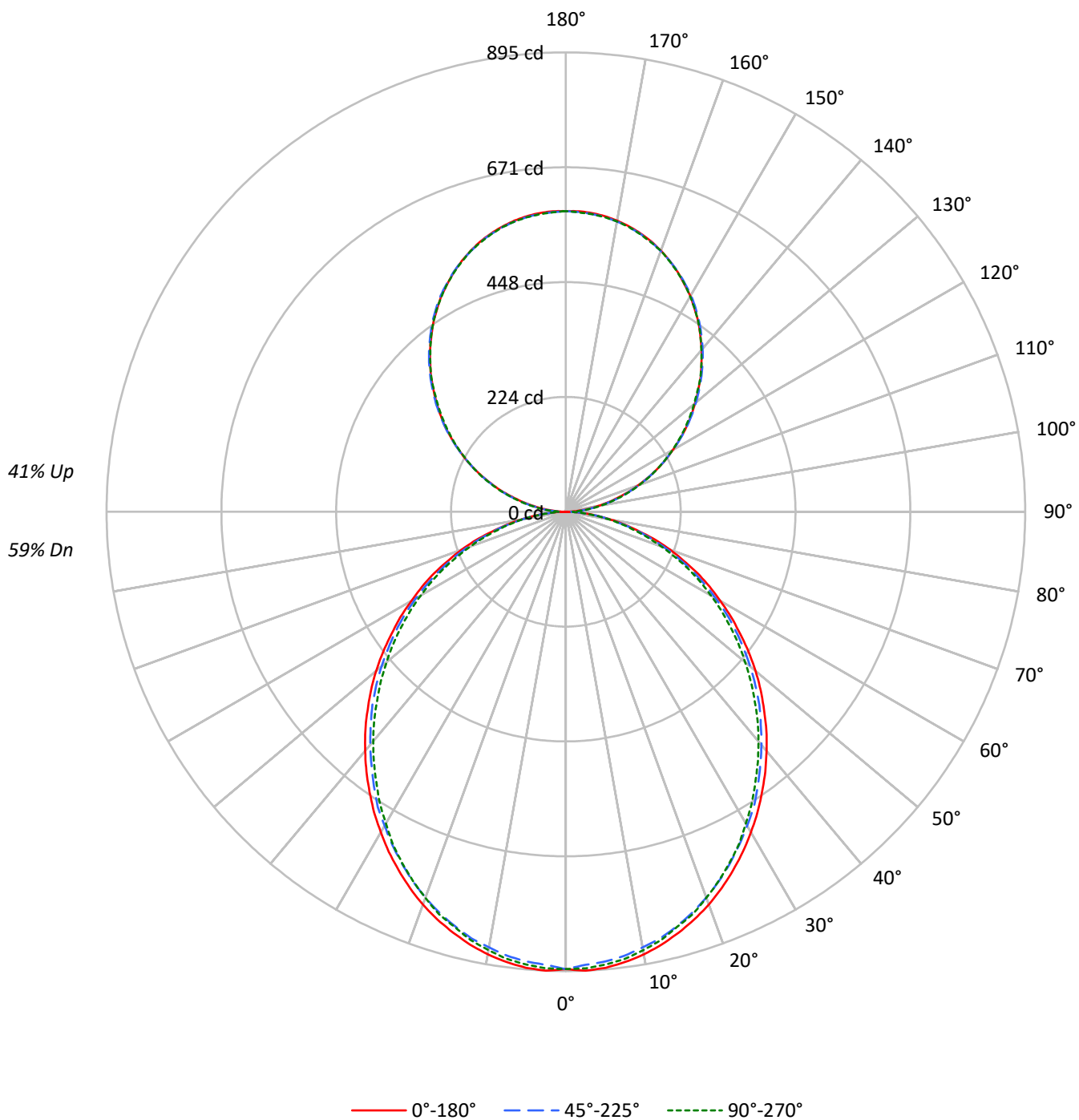
Lumens per Lamp: N/A
Luminaire Lumens: 3943.0 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	56	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°	9591	9591	9591
5°	9615	9261	9246
10°	9529	8946	8855
15°	9397	8621	8428
20°	9245	8259	8005
25°	9049	7877	7554
30°	8834	7482	7078
35°	8609	7078	6607
40°	8372	6654	6142
45°	8113	6241	5656
50°	7849	5781	5170
55°	7510	5302	4676
60°	7162	4773	4151
65°	6834	4200	3603
70°	6364	3567	2964
75°	5683	2823	2301
80°	4908	1985	1627
85°	3823	1067	816

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8113 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.0	2.1
10°-20°	237.2	6.0
20°-30°	350.3	8.9
30°-40°	409.1	10.4
40°-50°	411.3	10.4
50°-60°	361.3	9.2
60°-70°	269.1	6.8
70°-80°	153.1	3.9
80°-90°	44.8	1.1
90°-100°	37.7	1.0
100°-110°	114.1	2.9
110°-120°	194.3	4.9
120°-130°	255.6	6.5
130°-140°	287.3	7.3
140°-150°	282.4	7.2
150°-160°	237.8	6.0
160°-170°	158.3	4.0
170°-180°	55.4	1.4
0°-30°	671.5	17.0
0°-40°	1080.6	27.4
0°-60°	1853.3	47.0
0°-90°	2320.3	58.8
90°-120°	346.1	8.8
90°-150°	1171.3	29.7
90°-180°	1623.0	41.2
0°-180°	3943.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	892	888	880	887	886	85
15°	849	846	836	842	837	239
25°	771	766	756	757	755	355
35°	667	662	652	647	644	417
45°	546	543	533	524	520	422
55°	414	414	404	395	392	371
65°	283	279	271	265	263	279
75°	149	146	144	140	138	160
85°	40	38	38	37	37	43
90°	0	5	11	13	14	5
95°	27	30	34	36	36	30
105°	104	104	109	109	110	111
115°	196	197	196	196	196	193
125°	286	288	287	285	283	255
135°	371	374	374	372	371	286
145°	450	451	453	452	450	281
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°	891.0	891.0	891.0	891.0	891.0
2.5°	894.9	891.8	883.4	891.0	890.3
5°	891.8	888.0	879.6	887.2	885.7
7.5°	884.9	881.1	872.7	879.6	878.8
10°	875.7	871.9	861.9	868.8	867.3
12.5°	863.5	860.4	851.2	855.8	855.0
15°	848.9	845.8	835.9	842.0	837.4
17.5°	832.8	829.0	819.0	823.6	822.1
20°	814.4	809.8	799.9	802.9	800.6
22.5°	793.7	789.1	779.2	781.5	778.4
25°	770.8	766.2	756.2	757.0	754.7
27.5°	747.0	742.4	731.7	732.5	730.2
30°	721.0	717.1	706.4	706.4	701.0
32.5°	694.9	689.5	681.9	676.5	674.2
35°	666.6	662.0	652.0	647.4	643.6
37.5°	638.2	632.1	622.1	616.8	614.5
40°	608.3	603.7	593.0	586.9	583.8
42.5°	578.5	573.1	562.4	556.2	553.2
45°	546.3	543.2	533.2	524.1	520.2
47.5°	514.9	510.3	501.1	491.9	488.8
50°	482.7	478.9	468.9	460.5	455.9
52.5°	449.0	446.7	435.9	429.1	424.5
55°	414.5	413.7	403.8	395.3	391.5
57.5°	382.3	379.3	371.6	363.9	359.3
60°	347.1	346.3	337.1	330.2	326.4
62.5°	315.7	313.4	304.2	297.3	295.0
65°	282.7	278.9	271.2	265.1	262.8
67.5°	247.5	244.4	238.3	232.9	229.8
70°	216.1	211.5	206.9	201.5	197.7
72.5°	183.1	180.0	174.7	170.1	168.6
75°	149.4	146.3	144.0	140.2	137.9
77.5°	119.5	118.0	114.9	111.9	111.9
80°	90.4	88.1	86.6	85.8	85.8
82.5°	62.1	62.1	62.1	60.5	59.8
85°	39.8	38.3	38.3	36.8	36.8
87.5°	19.9	17.6	16.9	16.1	16.1
90°	0.5	5.1	11.0	12.9	13.8
92.5°	13.8	16.6	19.3	20.7	19.8
95°	27.1	30.4	34.0	35.9	35.9
97.5°	44.6	46.9	49.7	52.0	51.5
100°	62.6	65.3	67.6	69.0	69.9
102.5°	83.3	84.7	87.9	89.3	88.8
105°	103.5	104.4	108.6	108.6	109.5
107.5°	127.4	127.9	129.7	131.1	130.7
110°	149.5	150.4	151.4	153.2	152.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	172.5	173.0	173.0	175.3	175.3
115°	195.5	196.9	196.0	196.4	196.0
117.5°	219.0	219.5	218.5	218.5	217.2
120°	240.6	243.4	241.1	240.6	239.7
122.5°	263.2	265.0	264.1	262.7	261.3
125°	286.2	287.5	286.6	284.8	282.9
127.5°	307.3	310.1	309.2	306.4	304.6
130°	328.5	332.2	330.8	328.9	325.7
132.5°	349.6	353.3	352.4	350.1	347.8
135°	371.3	374.0	373.6	371.7	370.8
137.5°	391.1	393.4	394.7	392.4	391.1
140°	411.8	414.1	414.5	414.1	410.8
142.5°	430.6	432.9	433.8	433.4	431.1
145°	450.4	451.3	452.7	452.2	450.4
147.5°	467.4	469.3	470.6	470.6	467.9
150°	485.4	486.3	487.2	487.2	484.4
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)