

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: P1031796

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031796
REPORT IS A COMBINATION OF REPORTS P991752 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-F
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

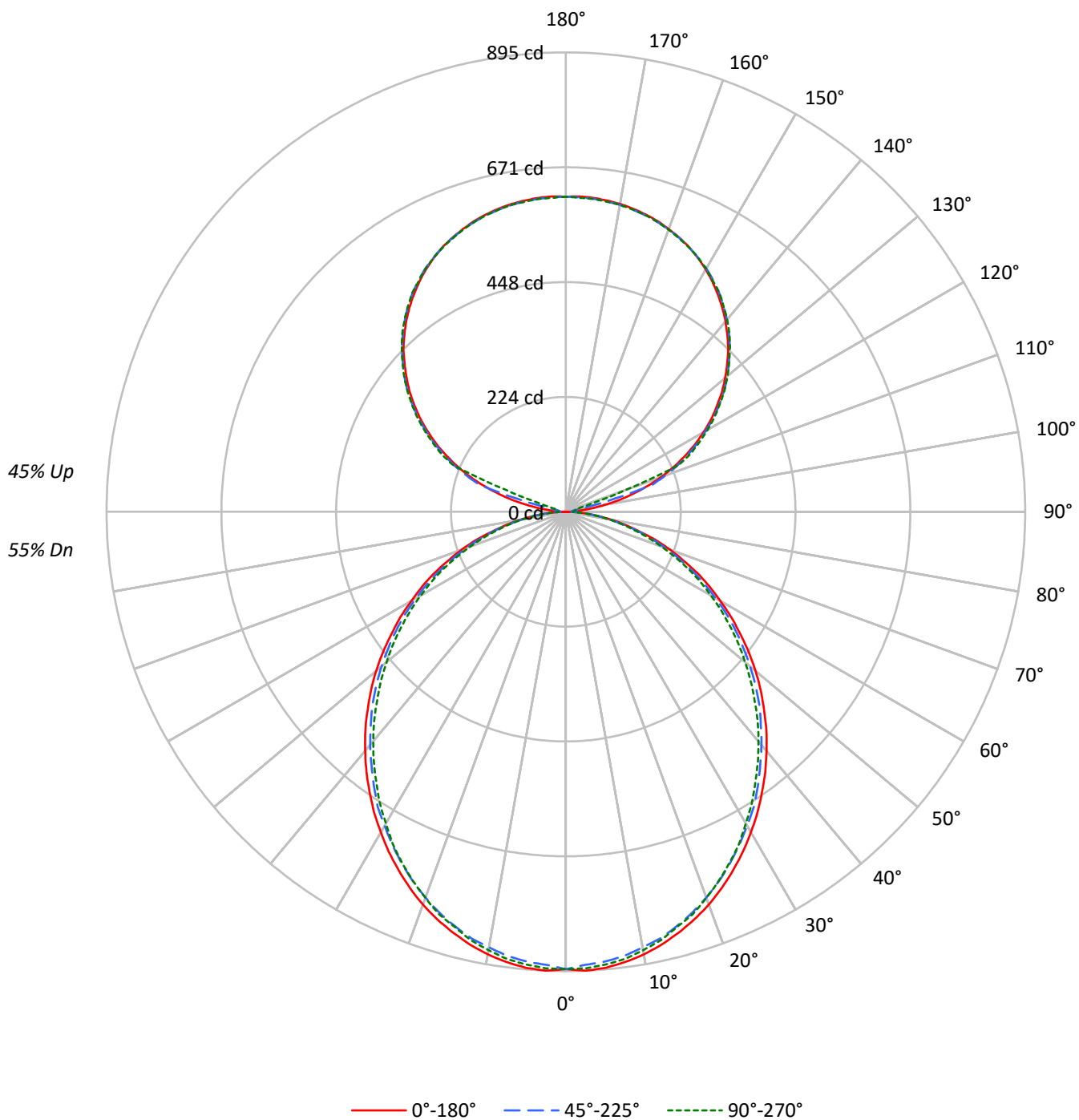
Lumens per Lamp: N/A
Luminaire Lumens: 4192.0 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	99	95	91	87	92	88	85	81	76	73	71	64	62	61	54	53	51
2	90	83	76	71	83	77	71	67	66	62	59	56	53	51	47	45	43
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	34	30	28
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	31	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	22
8	55	42	34	29	51	40	32	28	35	29	25	30	25	22	26	22	19
9	51	38	31	26	47	36	29	25	32	26	22	28	23	20	24	20	17
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	18	16

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	2.0
10°-20°	237.2	5.7
20°-30°	350.3	8.4
30°-40°	409.1	9.8
40°-50°	411.3	9.8
50°-60°	361.3	8.6
60°-70°	269.1	6.4
70°-80°	153.1	3.7
80°-90°	44.8	1.1
90°-100°	21.7	0.5
100°-110°	104.7	2.5
110°-120°	256.5	6.1
120°-130°	325.6	7.8
130°-140°	347.9	8.3
140°-150°	325.3	7.8
150°-160°	262.4	6.3
160°-170°	169.3	4.0
170°-180°	58.4	1.4
0°-30°	671.5	16.0
0°-40°	1080.6	25.8
0°-60°	1853.3	44.2
0°-90°	2320.3	55.3
90°-120°	382.9	9.1
90°-150°	1381.7	33.0
90°-180°	1872.0	44.7
0°-180°	4192.0	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	4
95°	28	9	14	17	17	33
105°	136	141	100	19	20	144
115°	255	258	262	266	268	252
125°	359	363	365	366	367	321
135°	448	450	452	453	452	345
145°	516	520	520	521	521	323
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°	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	5.0	10.9	12.8	13.7
92.5°	10.5	7.8	11.9	15.1	15.5
95°	27.8	9.1	14.1	17.3	17.3
97.5°	50.6	37.9	14.6	18.2	18.7
100°	77.1	86.2	15.1	18.7	19.2
102.5°	107.2	113.1	33.8	18.7	19.6
105°	135.9	141.0	99.9	19.2	20.1
107.5°	166.5	170.6	177.4	107.2	47.4
110°	197.1	200.7	205.7	190.7	125.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	226.3	229.4	234.5	238.6	237.7
115°	255.0	257.7	261.8	266.4	268.2
117.5°	283.3	286.5	288.7	292.4	292.8
120°	309.3	313.4	314.7	318.4	318.4
122.5°	335.7	338.9	340.7	343.0	343.5
125°	359.4	363.1	364.9	365.8	366.7
127.5°	383.2	386.8	389.1	390.5	389.6
130°	405.1	408.7	410.5	412.4	411.4
132.5°	426.0	429.7	431.1	432.9	431.5
135°	447.5	450.2	452.0	453.4	452.0
137.5°	465.7	469.4	470.3	472.6	471.7
140°	484.0	486.7	488.1	489.9	489.0
142.5°	500.9	503.6	505.0	506.3	505.0
145°	516.4	519.6	520.5	521.4	521.4
147.5°	531.4	533.7	534.6	535.5	533.2
150°	545.1	546.5	547.4	548.3	546.9
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)