

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: P1029414

Luminaire Tested: S122DIW-B290D710UB2750-4F0-XX-W2A-F1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029414
REPORT IS A COMBINATION OF REPORTS P985780 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D710UB2750-4F0-XX-W2A-F1_4000K
Description: Define 2 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

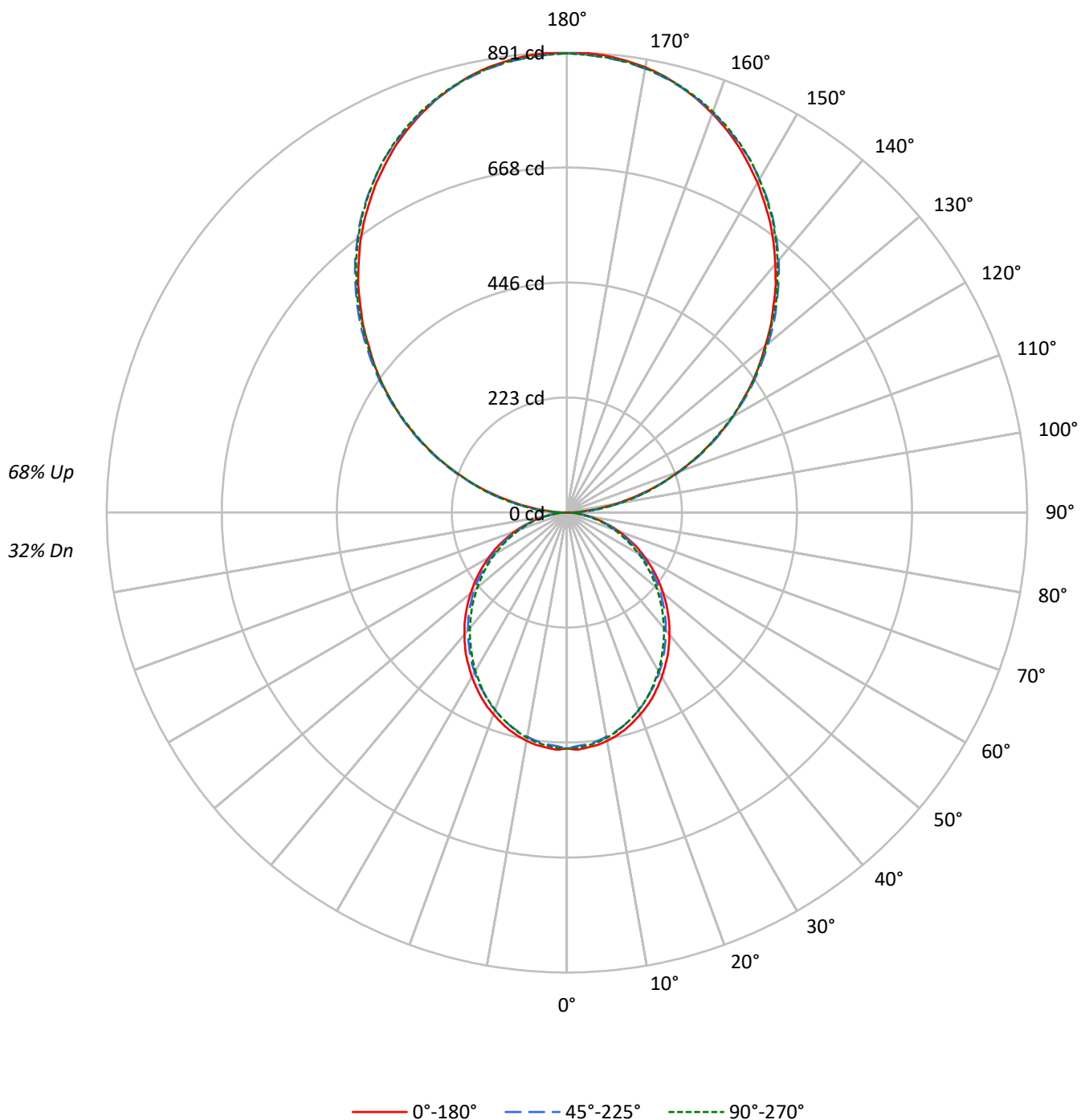
Lumens per Lamp: N/A
Luminaire Lumens: 3652.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 36.2
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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40
1	94	90	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33
2	85	78	72	67	76	70	65	61	56	53	50	43	41	39	31	29	28
3	78	69	62	56	70	62	56	51	49	45	42	38	35	33	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	21
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	23	19	16	17	14	12
9	48	36	29	24	43	33	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7236	7236	7236
5°	7247	6897	6849
10°	7189	6583	6453
15°	7083	6266	6036
20°	6941	5921	5641
25°	6799	5561	5247
30°	6622	5223	4834
35°	6453	4866	4428
40°	6246	4515	4044
45°	6039	4166	3667
50°	5813	3811	3278
55°	5574	3431	2907
60°	5307	3019	2523
65°	5016	2603	2118
70°	4643	2144	1711
75°	4128	1654	1321
80°	3513	1123	849
85°	2543	521	362

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6039 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	1.2
10°-20°	121.1	3.3
20°-30°	177.9	4.9
30°-40°	206.6	5.7
40°-50°	206.4	5.7
50°-60°	179.9	4.9
60°-70°	133.0	3.6
70°-80°	75.3	2.1
80°-90°	22.4	0.6
90°-100°	55.0	1.5
100°-110°	174.9	4.8
110°-120°	299.3	8.2
120°-130°	393.6	10.8
130°-140°	441.8	12.1
140°-150°	433.2	11.9
150°-160°	363.4	10.0
160°-170°	241.0	6.6
170°-180°	84.2	2.3
0°-30°	342.0	9.4
0°-40°	548.6	15.0
0°-60°	934.9	25.6
0°-90°	1165.5	31.9
90°-120°	529.2	14.5
90°-150°	1797.8	49.2
90°-180°	2486.0	68.1
0°-180°	3652.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	457	457	457	457	457	
5°	457	455	450	454	453	43
15°	435	432	427	429	426	123
25°	394	390	383	384	383	181
35°	340	335	328	326	324	212
45°	276	273	267	262	260	213
55°	209	207	201	196	194	187
65°	141	138	134	130	128	139
75°	74	73	71	68	69	79
85°	18	18	17	16	15	20
90°	1	10	26	25	26	4
95°	39	46	48	48	46	44
105°	161	164	165	167	167	170
115°	300	305	303	302	300	297
125°	437	444	441	439	438	390
135°	565	573	575	574	572	437
145°	686	691	696	696	694	429
155°	784	786	789	792	790	361
165°	853	853	853	858	854	241
175°	888	886	884	889	885	84
180°	889	889	889	889	889	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	457.1	457.1	457.1	457.1	457.1
2.5°	459.8	457.6	452.7	457.1	456.2
5°	457.1	455.4	450.5	454.0	453.2
7.5°	454.0	451.4	446.6	450.1	449.2
10°	449.2	446.1	440.9	444.4	443.1
12.5°	442.6	440.0	434.7	436.9	436.0
15°	435.1	432.5	426.8	428.6	426.4
17.5°	425.9	423.3	417.6	419.8	417.6
20°	415.8	413.2	407.0	408.3	406.6
22.5°	405.7	401.7	396.0	396.0	395.1
25°	393.8	390.3	382.8	383.7	382.8
27.5°	380.6	377.6	371.9	370.5	368.3
30°	367.5	363.9	357.3	356.0	354.3
32.5°	353.4	350.8	343.7	341.1	339.3
35°	339.8	335.4	328.3	325.7	323.5
37.5°	324.4	320.4	313.4	310.3	308.1
40°	308.6	305.0	298.0	294.1	292.3
42.5°	293.2	289.7	282.6	278.2	275.6
45°	276.5	273.4	266.8	262.0	260.2
47.5°	260.2	257.1	250.1	245.3	242.6
50°	243.1	240.9	234.7	228.6	226.4
52.5°	226.4	223.3	217.6	212.7	209.7
55°	209.2	206.6	201.3	196.0	193.8
57.5°	192.1	189.9	184.2	178.9	177.1
60°	174.9	173.2	167.0	162.2	160.9
62.5°	158.2	155.2	150.8	146.4	144.6
65°	141.1	138.5	134.1	130.1	127.9
67.5°	123.5	121.3	117.4	114.3	112.5
70°	107.2	105.5	101.5	98.5	96.7
72.5°	90.5	88.8	86.6	83.5	82.2
75°	73.8	73.0	70.8	68.1	69.0
77.5°	58.9	57.1	56.3	54.9	53.6
80°	44.0	43.5	42.6	41.3	40.4
82.5°	29.9	29.9	29.4	27.7	27.7
85°	18.0	17.6	17.1	15.8	15.4
87.5°	7.9	7.0	6.2	4.8	4.4
90°	0.8	9.8	26.3	24.8	25.5
92.5°	16.5	22.5	23.3	24.0	24.0
95°	39.0	46.5	48.0	48.0	46.5
97.5°	65.3	72.0	75.1	75.1	75.1
100°	95.3	101.3	103.6	103.6	102.8
102.5°	126.8	131.3	134.3	135.1	134.3
105°	161.4	163.6	165.1	166.6	166.6
107.5°	195.9	198.9	198.9	199.6	195.9
110°	228.9	233.4	233.4	233.4	231.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	264.9	269.4	268.7	266.4	264.9
115°	300.2	304.7	303.2	302.5	300.2
117.5°	335.5	341.5	337.7	335.5	333.2
120°	370.8	376.8	370.8	370.8	368.5
122.5°	403.0	410.5	406.8	404.5	403.0
125°	436.8	443.6	441.3	439.0	438.3
127.5°	469.8	478.1	475.1	472.1	469.8
130°	500.6	510.3	508.8	507.3	504.3
132.5°	535.1	542.6	543.4	539.6	537.4
135°	565.1	573.4	574.9	574.1	571.9
137.5°	598.2	604.9	606.4	605.7	602.7
140°	627.4	634.2	637.9	637.9	634.9
142.5°	657.4	664.2	666.5	667.2	664.2
145°	686.0	691.2	695.7	696.5	693.5
147.5°	711.5	718.2	721.2	722.7	719.7
150°	737.8	742.3	745.3	747.5	745.3
152.5°	761.0	765.5	769.3	772.3	769.3
155°	784.3	786.5	788.8	792.5	790.3
157.5°	804.5	806.0	807.5	812.8	809.1
160°	822.6	824.1	824.8	829.3	826.3
162.5°	839.1	839.1	839.8	845.1	841.3
165°	853.3	852.6	852.6	857.8	854.1
167.5°	866.1	863.8	863.8	869.1	865.3
170°	875.8	873.6	872.8	878.1	873.6
172.5°	882.6	880.3	879.6	884.9	880.3
175°	887.9	885.6	884.1	889.4	884.9
177.5°	890.9	888.6	887.1	891.6	887.1
180°	889.4	889.4	889.4	889.4	889.4

(END OF REPORT)