

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: P1029404

Luminaire Tested: S122DIW-B290D710UB2750-4F0-XX-W2A-D1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029404
REPORT IS A COMBINATION OF REPORTS P985765 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-D1_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

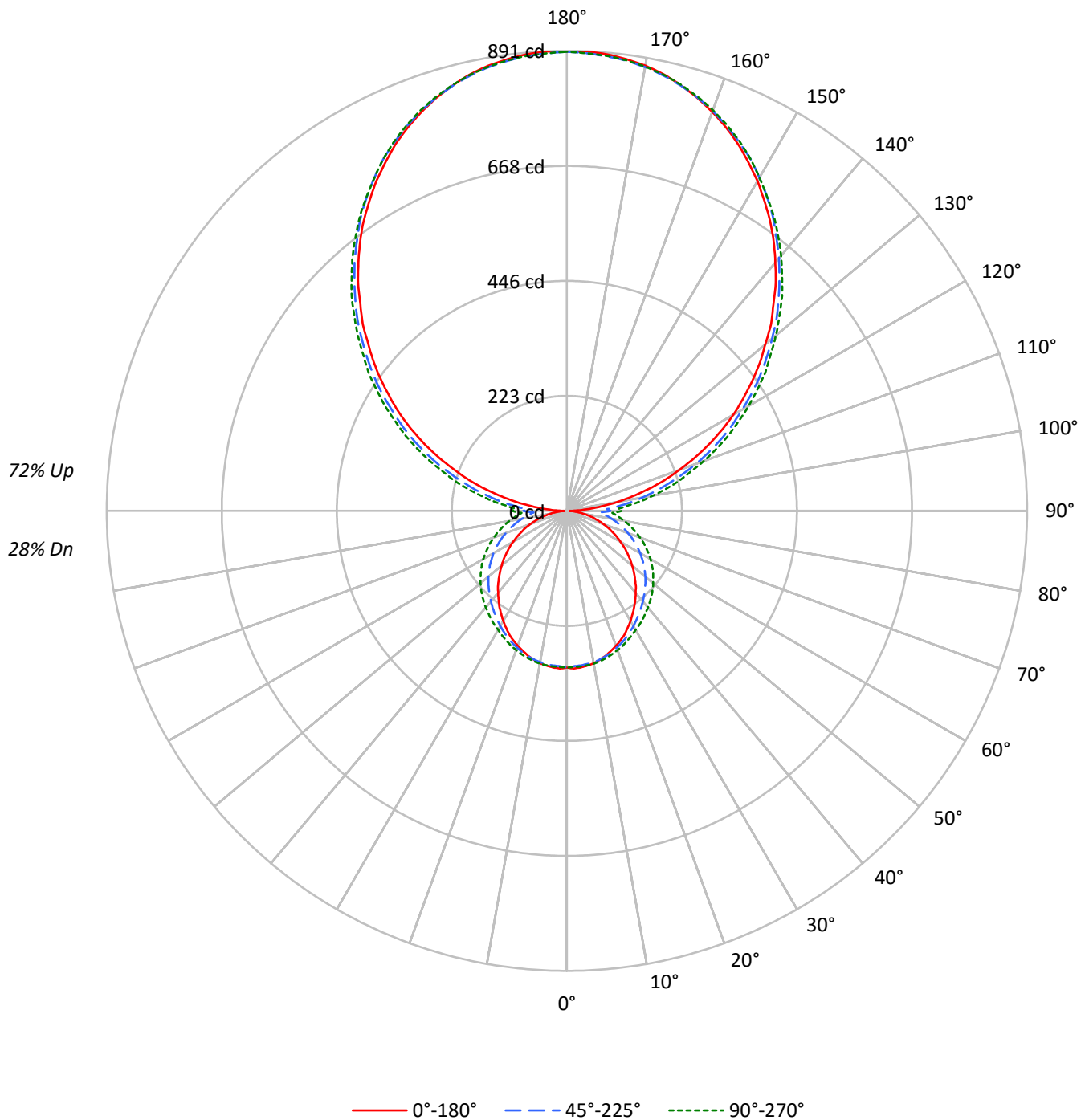
Lumens per Lamp: N/A
Luminaire Lumens: 3647.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28			
1	92	88	83	80	82	78	75	72	61	59	57	45	44	42	31	30	29	22			
2	83	76	70	64	74	68	63	58	53	49	46	39	37	35	26	25	24	18			
3	76	66	59	53	67	59	53	48	46	42	38	34	31	29	23	21	20	15			
4	69	58	51	45	61	52	46	40	41	36	32	30	27	24	20	18	17	12			
5	63	52	44	38	56	46	40	34	36	31	28	27	24	21	18	16	14	11			
6	58	46	38	32	52	42	35	30	33	28	24	24	21	18	17	14	12	9			
7	54	42	34	28	48	37	31	26	29	24	21	22	18	16	15	13	11	8			
8	50	37	30	25	44	34	27	22	27	22	18	20	17	14	14	11	10	7			
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	13	10	9	6			
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4804	4804	4804
5°	4826	4599	4573
10°	4793	4439	4375
15°	4726	4275	4172
20°	4641	4101	3979
25°	4556	3936	3803
30°	4438	3767	3631
35°	4319	3605	3504
40°	4194	3465	3377
45°	4073	3338	3267
50°	3943	3221	3159
55°	3808	3097	3048
60°	3644	2967	2931
65°	3470	2816	2797
70°	3278	2657	2654
75°	3026	2497	2517
80°	2635	2330	2376
85°	2232	2174	2255

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4073 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.8	0.8
10°-20°	82.5	2.3
20°-30°	125.0	3.4
30°-40°	152.2	4.2
40°-50°	163.8	4.5
50°-60°	159.1	4.4
60°-70°	138.9	3.8
70°-80°	106.9	2.9
80°-90°	74.2	2.0
90°-100°	104.4	2.9
100°-110°	211.0	5.8
110°-120°	323.1	8.9
120°-130°	406.9	11.2
130°-140°	447.4	12.3
140°-150°	434.2	11.9
150°-160°	363.4	10.0
160°-170°	241.0	6.6
170°-180°	84.2	2.3
0°-30°	236.3	6.5
0°-40°	388.5	10.7
0°-60°	711.5	19.5
0°-90°	1031.4	28.3
90°-120°	638.5	17.5
90°-150°	1926.9	52.8
90°-180°	2616.0	71.7
0°-180°	3647.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	304	304	304	304	304	
5°	304	303	300	303	303	29
15°	290	291	291	295	295	82
25°	264	267	271	276	278	121
35°	227	235	243	253	256	142
45°	186	198	214	227	232	144
55°	143	159	182	198	203	128
65°	98	119	145	163	169	97
75°	54	79	107	126	132	57
85°	16	43	71	90	96	17
90°	5	40	84	100	106	6
95°	42	71	99	115	119	46
105°	164	179	203	220	225	173
115°	302	311	330	342	345	299
125°	438	444	456	466	469	391
135°	566	574	580	588	590	437
145°	686	691	696	699	698	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°	303.5	303.5	303.5	303.5	303.5
2.5°	305.7	304.4	301.3	303.5	302.6
5°	304.4	303.0	300.4	303.0	302.6
7.5°	302.2	301.3	299.1	302.2	301.7
10°	299.5	298.6	297.3	300.8	300.4
12.5°	295.1	295.6	294.7	298.2	297.8
15°	290.3	291.2	291.2	295.1	294.7
17.5°	284.1	285.9	287.2	291.2	291.2
20°	278.0	280.2	281.9	286.8	286.8
22.5°	271.4	274.0	276.7	281.5	282.4
25°	263.9	267.0	270.9	276.2	277.5
27.5°	255.1	259.9	264.3	270.9	271.8
30°	246.3	252.0	257.7	264.8	266.1
32.5°	236.6	243.2	250.3	258.6	261.3
35°	227.4	234.9	243.2	252.9	256.0
37.5°	217.3	225.6	236.2	246.7	249.8
40°	207.2	216.8	228.7	240.2	244.1
42.5°	197.5	207.2	221.2	234.0	238.0
45°	186.5	198.4	213.8	227.4	231.8
47.5°	175.9	188.7	206.3	220.4	225.2
50°	164.9	178.6	198.4	213.3	218.2
52.5°	154.4	168.9	190.0	205.4	210.7
55°	142.9	158.8	181.7	197.5	203.2
57.5°	132.0	149.5	172.4	189.6	195.3
60°	120.1	139.0	164.1	180.8	186.9
62.5°	109.5	129.3	154.4	172.4	178.1
65°	97.6	119.2	145.1	163.2	168.9
67.5°	87.1	109.5	135.9	153.9	160.1
70°	75.7	98.5	125.8	144.7	150.0
72.5°	65.1	88.8	116.6	135.0	141.6
75°	54.1	78.7	106.9	125.8	131.5
77.5°	43.5	69.1	97.6	116.6	122.7
80°	33.0	59.8	88.4	106.9	113.0
82.5°	24.2	50.6	79.6	98.1	103.8
85°	15.8	43.1	71.3	89.7	95.9
87.5°	9.7	36.1	64.2	82.2	88.0
90°	5.2	39.7	84.4	100.5	106.4
92.5°	20.5	49.8	77.4	95.3	100.5
95°	42.5	70.7	98.6	115.3	119.1
97.5°	68.4	94.0	122.6	138.9	144.2
100°	98.4	120.7	147.6	163.9	167.9
102.5°	129.4	148.5	175.2	191.8	195.9
105°	163.6	178.6	202.9	219.8	224.7
107.5°	198.1	211.7	233.6	249.3	250.4
110°	230.7	244.0	265.5	279.6	282.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.7	278.2	297.7	309.5	312.8
115°	302.0	311.3	329.6	342.1	344.6
117.5°	336.8	346.3	361.0	372.0	374.1
120°	372.1	379.9	391.5	403.8	406.3
122.5°	404.3	412.3	424.8	434.4	436.9
125°	437.7	444.5	456.3	465.8	469.1
127.5°	470.7	478.5	487.4	495.4	497.1
130°	501.5	510.7	518.5	527.5	528.1
132.5°	536.0	543.0	550.4	556.8	558.1
135°	565.5	573.8	579.7	588.2	589.5
137.5°	598.6	605.3	609.0	616.7	616.8
140°	627.8	634.2	638.8	645.8	645.5
142.5°	657.8	664.2	666.5	672.5	671.7
145°	686.0	691.2	695.7	699.1	698.3
147.5°	711.5	718.2	721.2	723.1	721.5
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)