

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: P1029408

Luminaire Tested: S122DIW-B290D710UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029408
REPORT IS A COMBINATION OF REPORTS P985774 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-D_3500K
Description: Define 2 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

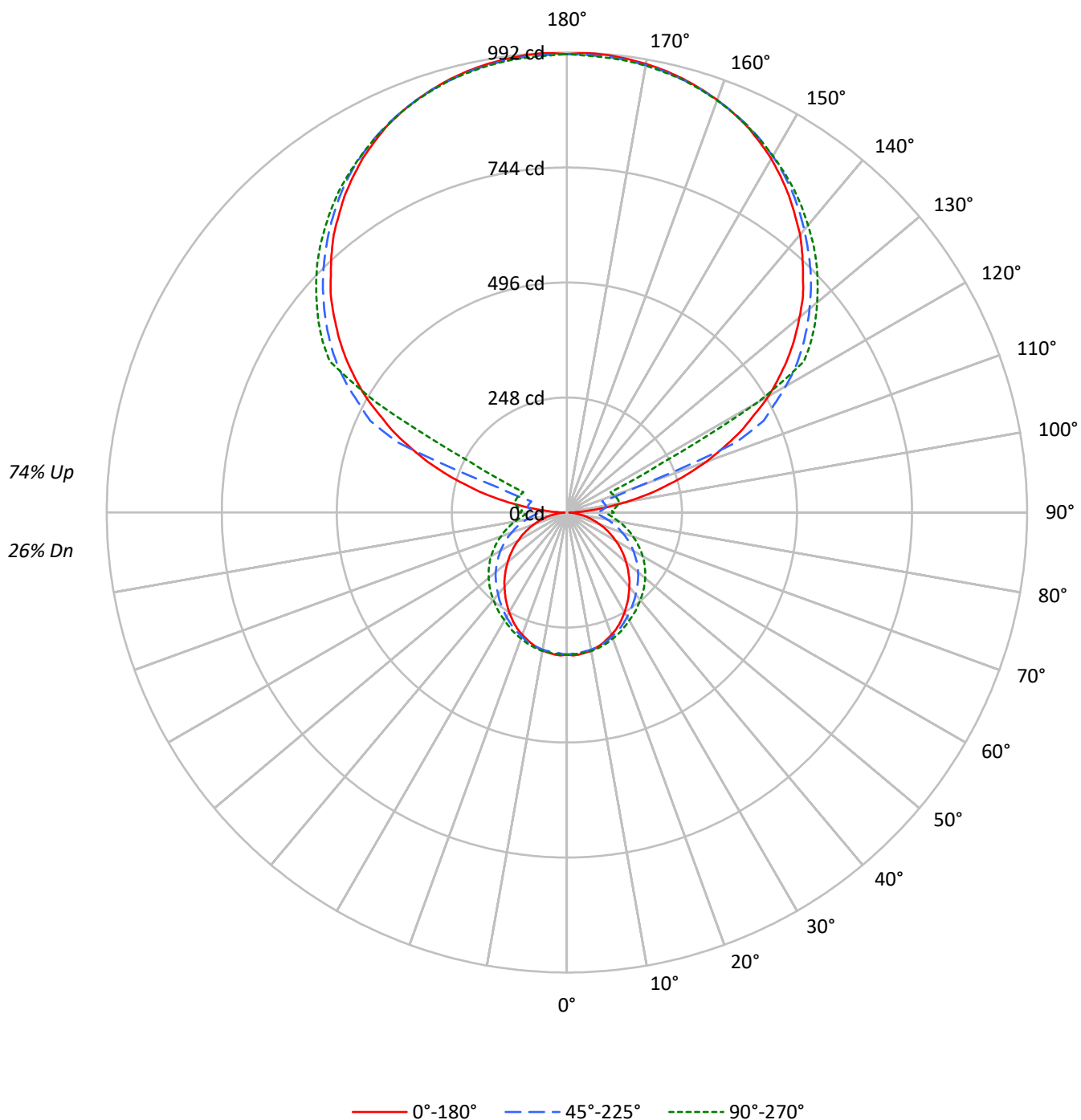
Lumens per Lamp: N/A
Luminaire Lumens: 4068.0 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1029408

CATALOG NUMBER: S122DIW-B290D710UB2750-4F0-XX-W2A-D_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1029408

CATALOG NUMBER: S122DIW-B290D710UB2750-4F0-XX-W2A-D_3500K

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
RCR																	
0	101	101	101	101	90	90	90	90	70	70	70		51	51	51		34
1	92	87	83	79	81	78	74	71	60	58	55		44	42	41		29
2	83	76	69	64	74	67	62	58	52	48	45		38	35	33		25
3	75	66	59	53	67	59	53	48	45	41	38		33	30	28		22
4	69	58	50	44	61	52	45	40	40	35	32		29	26	24		19
5	63	52	44	38	56	46	39	34	36	31	27		26	23	20		17
6	58	46	38	32	51	41	34	29	32	27	23		23	20	17		15
7	53	41	34	28	47	37	30	25	29	24	20		21	18	15		14
8	49	37	30	25	44	33	27	22	26	21	18		19	16	13		13
9	46	34	27	22	41	30	24	20	24	19	16		18	14	12		12
10	43	31	24	19	38	28	22	17	22	17	14		16	13	11		11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4850	4850	4850
5°	4872	4643	4617
10°	4839	4483	4417
15°	4770	4315	4212
20°	4684	4141	4017
25°	4599	3973	3840
30°	4479	3804	3665
35°	4360	3639	3537
40°	4232	3498	3409
45°	4112	3370	3298
50°	3982	3252	3188
55°	3845	3126	3076
60°	3678	2994	2959
65°	3505	2843	2824
70°	3309	2682	2678
75°	3054	2520	2542
80°	2659	2351	2399
85°	2260	2192	2276

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4112 cd/sqm

TEST NUMBER: P1029408

CATALOG NUMBER: S122DIW-B290D710UB2750-4F0-XX-W2A-D_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	0.7
10°-20°	83.3	2.0
20°-30°	126.2	3.1
30°-40°	153.7	3.8
40°-50°	165.4	4.1
50°-60°	160.6	3.9
60°-70°	140.2	3.4
70°-80°	108.0	2.7
80°-90°	74.0	1.8
90°-100°	82.5	2.0
100°-110°	157.9	3.9
110°-120°	346.2	8.5
120°-130°	547.8	13.5
130°-140°	573.2	14.1
140°-150°	528.5	13.0
150°-160°	424.1	10.4
160°-170°	273.3	6.7
170°-180°	94.1	2.3
0°-30°	238.5	5.9
0°-40°	392.2	9.6
0°-60°	718.2	17.7
0°-90°	1040.4	25.6
90°-120°	586.6	14.4
90°-150°	2236.1	55.0
90°-180°	3028.0	74.4
0°-180°	4068.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	307	306	303	306	306	29
15°	293	294	294	298	298	83
25°	266	270	274	279	280	123
35°	230	237	246	255	258	143
45°	188	200	216	230	234	145
55°	144	160	183	199	205	129
65°	99	120	146	165	170	98
75°	55	80	108	127	133	58
85°	16	44	72	91	97	17
90°	5	39	73	94	101	6
95°	50	47	79	99	104	58
105°	220	254	82	105	113	235
115°	413	430	468	150	103	406
125°	582	592	619	636	642	519
135°	720	731	742	759	761	556
145°	834	834	846	854	852	522
155°	919	912	921	925	920	423
165°	968	964	966	971	966	274
175°	990	985	987	992	985	94
180°	988	988	988	988	988	

TEST NUMBER: P1029408

CATALOG NUMBER: S122DIW-B290D710UB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	306.4	306.4	306.4	306.4	306.4
2.5°	308.6	307.3	304.1	306.4	305.5
5°	307.3	305.9	303.3	305.9	305.5
7.5°	305.0	304.1	301.9	305.0	304.6
10°	302.4	301.5	300.2	303.7	303.3
12.5°	297.9	298.4	297.5	301.0	300.6
15°	293.0	293.9	293.9	297.9	297.5
17.5°	286.8	288.6	289.9	293.9	293.9
20°	280.6	282.8	284.6	289.5	289.5
22.5°	274.0	276.6	279.3	284.2	285.1
25°	266.4	269.5	273.5	278.8	280.2
27.5°	257.5	262.4	266.9	273.5	274.4
30°	248.6	254.4	260.2	267.3	268.6
32.5°	238.9	245.5	252.6	261.1	263.7
35°	229.6	237.1	245.5	255.3	258.4
37.5°	219.3	227.8	238.4	249.1	252.2
40°	209.1	218.9	230.9	242.4	246.4
42.5°	199.4	209.1	223.3	236.2	240.2
45°	188.3	200.3	215.8	229.6	234.0
47.5°	177.6	190.5	208.2	222.5	227.3
50°	166.5	180.3	200.3	215.3	220.2
52.5°	155.8	170.5	191.8	207.4	212.7
55°	144.3	160.3	183.4	199.4	205.1
57.5°	133.2	151.0	174.1	191.4	197.1
60°	121.2	140.3	165.6	182.5	188.7
62.5°	110.6	130.5	155.8	174.1	179.8
65°	98.6	120.3	146.5	164.7	170.5
67.5°	87.9	110.6	137.2	155.4	161.6
70°	76.4	99.5	127.0	146.1	151.4
72.5°	65.7	89.7	117.7	136.3	143.0
75°	54.6	79.5	107.9	127.0	132.8
77.5°	44.0	69.7	98.6	117.7	123.9
80°	33.3	60.4	89.2	107.9	114.1
82.5°	24.4	51.1	80.4	99.0	104.8
85°	16.0	43.5	71.9	90.6	96.8
87.5°	9.8	36.4	64.8	83.0	88.8
90°	5.1	38.8	72.9	94.3	101.0
92.5°	21.9	42.5	71.8	90.5	96.6
95°	50.1	47.3	79.0	99.4	104.0
97.5°	86.8	47.2	84.5	103.0	109.0
100°	129.7	48.1	85.2	107.3	113.6
102.5°	176.5	189.6	83.5	107.4	114.4
105°	219.6	253.9	81.8	105.2	112.9
107.5°	270.4	298.9	80.2	103.1	110.9
110°	318.6	342.5	157.5	100.2	108.0

TEST NUMBER: P1029408

CATALOG NUMBER: S122DIW-B290D710UB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.4	384.3	392.6	98.6	105.6
115°	413.0	430.0	467.8	150.1	103.4
117.5°	454.7	472.6	503.3	414.5	231.5
120°	501.9	514.4	545.1	566.1	474.4
122.5°	541.9	553.9	584.6	600.9	605.6
125°	582.3	591.6	619.4	636.4	642.5
127.5°	619.5	629.0	651.7	670.0	674.7
130°	654.5	665.4	682.7	701.2	704.1
132.5°	690.3	699.1	713.6	730.3	733.1
135°	719.8	731.2	742.2	758.6	760.8
137.5°	751.3	759.8	769.3	784.8	785.8
140°	782.0	787.3	796.1	809.6	808.8
142.5°	807.7	812.4	821.7	832.7	831.3
145°	834.5	833.8	846.0	853.7	852.3
147.5°	858.1	856.0	868.1	872.1	870.6
150°	881.0	876.0	887.4	891.7	888.2
152.5°	900.3	894.6	905.3	909.6	904.6
155°	918.9	912.5	921.1	925.3	919.6
157.5°	933.9	928.2	934.6	939.6	933.9
160°	946.8	942.5	946.8	951.1	946.1
162.5°	958.2	953.9	957.5	962.5	956.1
165°	968.2	964.0	966.1	971.1	966.1
167.5°	976.1	971.8	974.0	979.0	972.5
170°	982.5	978.3	979.7	984.7	978.3
172.5°	986.8	982.5	984.0	989.0	982.5
175°	990.4	985.4	986.8	991.8	984.7
177.5°	991.8	986.8	987.6	992.6	986.1
180°	988.3	988.3	988.3	988.3	988.3

(END OF REPORT)