

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: P1029420

Luminaire Tested: S122DIW-B290D710UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029420
REPORT IS A COMBINATION OF REPORTS P985791 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-F_5000K
Description: Define 2 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

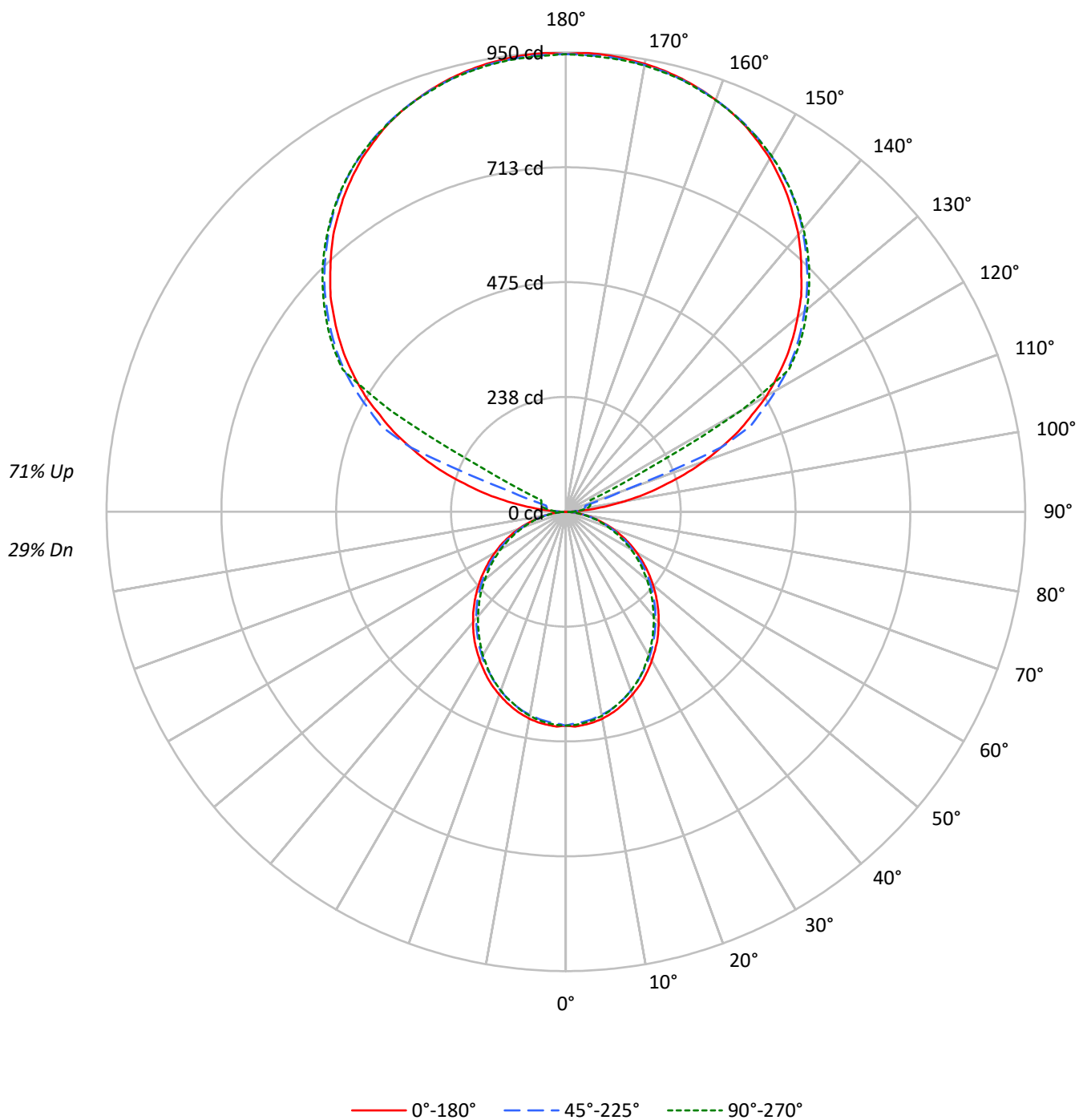
Lumens per Lamp: N/A
Luminaire Lumens: 3901.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1029420

CATALOG NUMBER: S122DIW-B290D710UB2750-4F0-XX-W2A-F_5000K

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				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	72	72	72	53	53	53	37	37	37	29	29	29	29			
1	93	89	85	82	83	80	77	74	63	61	59	47	46	44	32	32	31	24	24	24	24			
2	85	78	72	67	76	70	65	60	55	51	48	41	39	37	29	27	26	20	20	20	20			
3	77	68	61	55	69	61	55	50	48	44	41	36	34	31	25	24	22	17	17	17	17			
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	23	21	19	15	15	15	15			
5	65	53	46	40	58	48	41	36	38	33	30	29	26	23	20	18	17	13	13	13	13			
6	59	48	40	34	53	43	36	31	34	29	26	26	23	20	18	16	15	11	11	11	11			
7	55	43	35	30	49	39	32	27	31	26	23	24	20	18	17	15	13	10	10	10	10			
8	51	39	31	26	45	35	29	24	28	23	20	22	18	16	15	13	12	9	9	9	9			
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10	8	8	8	8			
10	44	32	25	21	39	29	23	19	24	19	16	18	15	13	13	11	9	7	7	7	7			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7000	7000	7000
5°	7011	6672	6625
10°	6953	6368	6242
15°	6852	6062	5838
20°	6714	5728	5457
25°	6578	5380	5075
30°	6405	5054	4676
35°	6243	4708	4283
40°	6041	4368	3911
45°	5840	4030	3548
50°	5622	3686	3170
55°	5393	3318	2812
60°	5134	2922	2440
65°	4852	2517	2049
70°	4491	2074	1654
75°	3994	1600	1279
80°	3393	1086	822
85°	2458	506	350

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5840 cd/sqm

TEST NUMBER: P1029420

CATALOG NUMBER: S122DIW-B290D710UB2750-4F0-XX-W2A-F_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.6	1.1
10°-20°	117.1	3.0
20°-30°	172.1	4.4
30°-40°	199.9	5.1
40°-50°	199.6	5.1
50°-60°	174.1	4.5
60°-70°	128.7	3.3
70°-80°	72.8	1.9
80°-90°	20.9	0.5
90°-100°	31.2	0.8
100°-110°	116.3	3.0
110°-120°	308.5	7.9
120°-130°	511.7	13.1
130°-140°	543.5	13.9
140°-150°	505.2	12.9
150°-160°	406.1	10.4
160°-170°	261.7	6.7
170°-180°	90.1	2.3
0°-30°	330.8	8.5
0°-40°	530.7	13.6
0°-60°	904.3	23.2
0°-90°	1126.7	28.9
90°-120°	456.0	11.7
90°-150°	2016.4	51.7
90°-180°	2774.0	71.1
0°-180°	3901.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	442	442	442	442	442	
5°	442	440	436	439	438	42
15°	421	418	413	415	412	119
25°	381	378	370	371	370	175
35°	329	324	318	315	313	205
45°	267	264	258	253	252	206
55°	202	200	195	190	188	181
65°	136	134	130	126	124	135
75°	71	71	68	66	67	76
85°	17	17	17	15	15	19
90°	1	8	14	17	18	4
95°	44	22	27	30	29	53
105°	208	229	42	49	52	222
115°	394	405	422	106	56	388
125°	557	566	579	583	586	497
135°	689	700	706	713	712	532
145°	799	798	810	815	811	500
155°	880	874	882	886	881	405
165°	927	923	925	930	925	262
175°	948	944	945	950	943	90
180°	946	946	946	946	946	

TEST NUMBER: P1029420

CATALOG NUMBER: S122DIW-B290D710UB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	442.2	442.2	442.2	442.2	442.2
2.5°	444.7	442.6	437.9	442.2	441.3
5°	442.2	440.5	435.8	439.2	438.4
7.5°	439.2	436.7	432.0	435.4	434.5
10°	434.5	431.6	426.5	429.9	428.6
12.5°	428.2	425.6	420.5	422.6	421.8
15°	420.9	418.4	412.9	414.6	412.4
17.5°	412.0	409.5	403.9	406.0	403.9
20°	402.2	399.7	393.7	395.0	393.3
22.5°	392.4	388.6	383.1	383.1	382.2
25°	381.0	377.6	370.3	371.2	370.3
27.5°	368.2	365.2	359.7	358.4	356.3
30°	355.5	352.1	345.7	344.4	342.7
32.5°	341.8	339.3	332.5	329.9	328.2
35°	328.7	324.4	317.6	315.1	312.9
37.5°	313.8	310.0	303.2	300.2	298.1
40°	298.5	295.1	288.3	284.4	282.7
42.5°	283.6	280.2	273.4	269.1	266.6
45°	267.4	264.5	258.1	253.4	251.7
47.5°	251.7	248.7	241.9	237.3	234.7
50°	235.1	233.0	227.0	221.1	219.0
52.5°	219.0	216.0	210.5	205.8	202.8
55°	202.4	199.8	194.7	189.6	187.5
57.5°	185.8	183.7	178.2	173.0	171.3
60°	169.2	167.5	161.6	156.9	155.6
62.5°	153.1	150.1	145.8	141.6	139.9
65°	136.5	133.9	129.7	125.9	123.7
67.5°	119.5	117.4	113.5	110.5	108.8
70°	103.7	102.0	98.2	95.2	93.5
72.5°	87.6	85.9	83.8	80.8	79.5
75°	71.4	70.6	68.5	65.9	66.8
77.5°	57.0	55.3	54.4	53.1	51.9
80°	42.5	42.1	41.2	40.0	39.1
82.5°	28.9	28.9	28.5	26.8	26.8
85°	17.4	17.0	16.6	15.3	14.9
87.5°	7.7	6.8	6.0	4.7	4.3
90°	0.7	8.2	13.7	17.1	18.5
92.5°	17.1	14.4	16.4	17.8	18.5
95°	44.5	21.9	26.7	30.1	29.4
97.5°	80.1	24.0	34.9	37.0	37.7
100°	121.2	27.4	39.0	44.5	45.9
102.5°	166.4	165.0	40.4	47.9	50.0
105°	208.2	228.7	41.8	49.3	52.0
107.5°	256.8	273.9	43.1	50.7	53.4
110°	303.3	317.7	119.8	51.4	54.1

TEST NUMBER: P1029420

CATALOG NUMBER: S122DIW-B290D710UB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	347.2	359.5	347.9	52.7	54.8
115°	393.7	405.4	422.5	105.5	56.2
117.5°	434.1	447.8	459.5	361.6	182.1
120°	479.3	489.6	501.9	510.1	417.7
122.5°	517.7	528.6	542.3	546.4	547.1
125°	556.7	565.6	578.6	583.4	585.5
127.5°	592.3	601.9	612.2	619.0	619.7
130°	625.9	636.8	644.4	651.9	651.2
132.5°	660.1	669.0	676.5	682.7	682.0
135°	688.9	699.8	706.0	712.8	711.5
137.5°	719.0	727.2	734.1	740.9	738.9
140°	748.4	753.9	761.5	767.6	764.2
142.5°	773.1	777.9	786.8	792.3	788.8
145°	799.1	798.4	810.1	814.9	811.4
147.5°	821.7	819.7	831.3	834.7	832.0
150°	843.6	838.8	849.8	853.9	850.5
152.5°	862.1	856.6	866.9	871.0	866.2
155°	879.9	873.8	882.0	886.1	880.6
157.5°	894.3	888.8	895.0	899.8	894.3
160°	906.6	902.5	906.6	910.7	905.9
162.5°	917.6	913.5	916.9	921.7	915.5
165°	927.2	923.1	925.1	929.9	925.1
167.5°	934.7	930.6	932.6	937.4	931.3
170°	940.9	936.8	938.1	942.9	936.8
172.5°	945.0	940.9	942.2	947.0	940.9
175°	948.4	943.6	945.0	949.8	942.9
177.5°	949.8	945.0	945.7	950.4	944.3
180°	946.3	946.3	946.3	946.3	946.3

(END OF REPORT)