

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: P1029388

Luminaire Tested: S122DIW-B290D435UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029388
REPORT IS A COMBINATION OF REPORTS P985699 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D435UB2750-4F0-XX-W2A-F_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

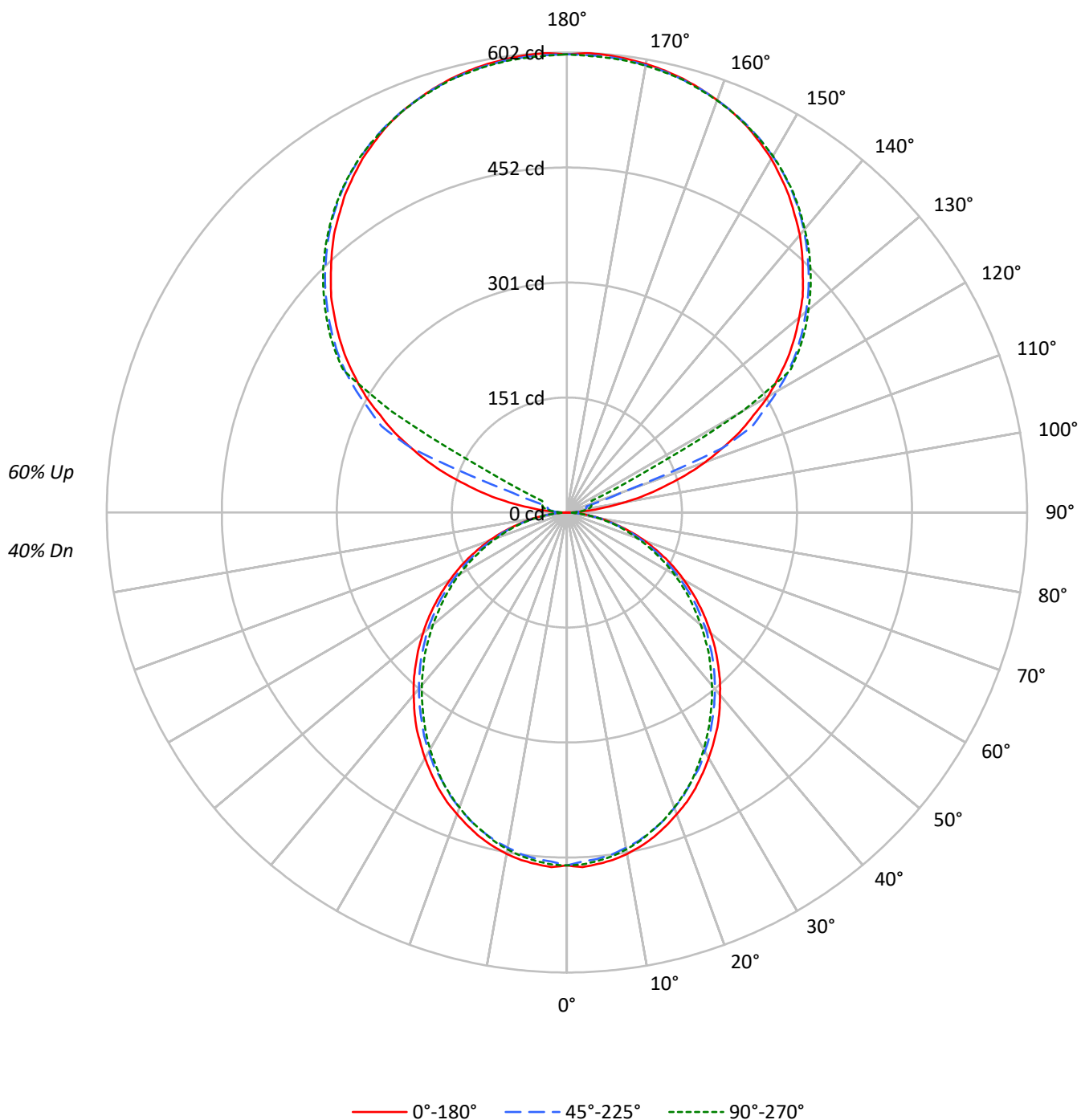
Lumens per Lamp: N/A
Luminaire Lumens: 2934.0 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 26.2
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: P1029388

CATALOG NUMBER: S122DIW-B290D435UB2750-4F0-XX-W2A-F_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1029388

CATALOG NUMBER: S122DIW-B290D435UB2750-4F0-XX-W2A-F_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	30	10	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47			40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40			34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	33			28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28			24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	24			21
5	67	55	47	41	60	51	44	38	42	37	33	34	30	27	26	23	21			18
6	61	49	41	36	56	45	38	33	38	32	28	30	26	23	24	21	19			16
7	57	45	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17			14
8	52	40	33	28	48	37	30	26	31	26	22	25	21	18	20	17	15			12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	18	16	13			11
10	46	34	27	22	41	31	25	20	26	21	18	21	18	15	17	14	12			10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7310	7310	7310
5°	7322	6969	6918
10°	7262	6651	6518
15°	7156	6331	6099
20°	7013	5983	5700
25°	6870	5619	5302
30°	6688	5277	4883
35°	6520	4917	4473
40°	6309	4562	4085
45°	6100	4210	3706
50°	5873	3850	3311
55°	5633	3467	2937
60°	5362	3050	2548
65°	5066	2628	2140
70°	4694	2167	1728
75°	4173	1670	1334
80°	3545	1136	860
85°	2571	528	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6100 cd/sqm

TEST NUMBER: P1029388

CATALOG NUMBER: S122DIW-B290D435UB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	1.5
10°-20°	122.3	4.2
20°-30°	179.7	6.1
30°-40°	208.7	7.1
40°-50°	208.5	7.1
50°-60°	181.8	6.2
60°-70°	134.4	4.6
70°-80°	76.0	2.6
80°-90°	21.1	0.7
90°-100°	19.8	0.7
100°-110°	73.7	2.5
110°-120°	195.5	6.7
120°-130°	324.2	11.1
130°-140°	344.4	11.7
140°-150°	320.1	10.9
150°-160°	257.3	8.8
160°-170°	165.8	5.7
170°-180°	57.1	1.9
0°-30°	345.5	11.8
0°-40°	554.2	18.9
0°-60°	944.5	32.2
0°-90°	1176.0	40.1
90°-120°	289.0	9.8
90°-150°	1277.7	43.5
90°-180°	1758.0	59.9
0°-180°	2934.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	462	460	455	459	458	44
15°	440	437	431	433	431	124
25°	398	394	387	388	387	183
35°	343	339	332	329	327	214
45°	279	276	270	265	263	216
55°	211	209	203	198	196	189
65°	142	140	135	131	129	141
75°	75	74	72	69	70	80
85°	18	18	17	16	16	20
90°	0	5	9	11	12	3
95°	28	14	17	19	19	33
105°	132	145	26	31	33	141
115°	250	257	268	67	36	246
125°	353	358	367	370	371	315
135°	436	443	447	452	451	337
145°	506	506	513	516	514	317
155°	558	554	559	562	558	257
165°	588	585	586	589	586	166
175°	601	598	599	602	598	57
180°	600	600	600	600	600	

TEST NUMBER: P1029388

CATALOG NUMBER: S122DIW-B290D435UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.8	461.8	461.8	461.8	461.8
2.5°	464.5	462.3	457.4	461.8	461.0
5°	461.8	460.1	455.2	458.7	457.8
7.5°	458.7	456.1	451.2	454.7	453.8
10°	453.8	450.7	445.4	449.0	447.6
12.5°	447.2	444.5	439.2	441.4	440.5
15°	439.6	437.0	431.2	433.0	430.8
17.5°	430.3	427.6	421.9	424.1	421.9
20°	420.1	417.4	411.2	412.5	410.8
22.5°	409.9	405.9	400.1	400.1	399.2
25°	397.9	394.3	386.8	387.7	386.8
27.5°	384.6	381.5	375.7	374.4	372.1
30°	371.2	367.7	361.0	359.7	357.9
32.5°	357.0	354.4	347.3	344.6	342.8
35°	343.3	338.8	331.7	329.1	326.8
37.5°	327.7	323.7	316.6	313.5	311.3
40°	311.7	308.2	301.1	297.1	295.3
42.5°	296.2	292.6	285.5	281.1	278.4
45°	279.3	276.2	269.6	264.7	262.9
47.5°	262.9	259.8	252.7	247.8	245.1
50°	245.6	243.4	237.1	230.9	228.7
52.5°	228.7	225.6	219.8	214.9	211.8
55°	211.4	208.7	203.4	198.1	195.8
57.5°	194.1	191.8	186.1	180.7	179.0
60°	176.7	175.0	168.7	163.9	162.5
62.5°	159.9	156.8	152.3	147.9	146.1
65°	142.5	139.9	135.4	131.4	129.2
67.5°	124.8	122.6	118.6	115.5	113.7
70°	108.4	106.6	102.6	99.5	97.7
72.5°	91.5	89.7	87.5	84.4	83.0
75°	74.6	73.7	71.5	68.8	69.7
77.5°	59.5	57.7	56.8	55.5	54.2
80°	44.4	44.0	43.1	41.7	40.9
82.5°	30.2	30.2	29.8	28.0	28.0
85°	18.2	17.8	17.3	16.0	15.5
87.5°	8.0	7.1	6.2	4.9	4.4
90°	0.4	5.2	8.7	10.8	11.7
92.5°	10.8	9.1	10.4	11.3	11.7
95°	28.2	13.9	16.9	19.1	18.7
97.5°	50.8	15.2	22.1	23.4	23.9
100°	76.8	17.4	24.7	28.2	29.1
102.5°	105.4	104.6	25.6	30.4	31.7
105°	131.9	144.9	26.5	31.2	33.0
107.5°	162.7	173.6	27.3	32.1	33.8
110°	192.2	201.3	75.9	32.5	34.3

TEST NUMBER: P1029388

CATALOG NUMBER: S122DIW-B290D435UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.0	227.8	220.4	33.4	34.7
115°	249.5	256.9	267.7	66.8	35.6
117.5°	275.1	283.8	291.1	229.1	115.4
120°	303.7	310.2	318.0	323.3	264.7
122.5°	328.0	335.0	343.6	346.2	346.7
125°	352.8	358.4	366.6	369.7	371.0
127.5°	375.3	381.4	387.9	392.2	392.7
130°	396.6	403.5	408.3	413.1	412.6
132.5°	418.3	423.9	428.7	432.6	432.2
135°	436.5	443.4	447.3	451.7	450.8
137.5°	455.6	460.8	465.1	469.5	468.2
140°	474.2	477.7	482.5	486.4	484.2
142.5°	489.9	492.9	498.5	502.0	499.8
145°	506.4	505.9	513.3	516.3	514.2
147.5°	520.7	519.4	526.7	528.9	527.2
150°	534.6	531.5	538.5	541.1	538.9
152.5°	546.3	542.8	549.3	551.9	548.9
155°	557.6	553.7	558.9	561.5	558.0
157.5°	566.7	563.2	567.1	570.1	566.7
160°	574.5	571.9	574.5	577.1	574.0
162.5°	581.4	578.8	581.0	584.0	580.1
165°	587.5	584.9	586.2	589.2	586.2
167.5°	592.3	589.7	591.0	594.0	590.1
170°	596.2	593.6	594.4	597.5	593.6
172.5°	598.8	596.2	597.0	600.1	596.2
175°	600.9	597.9	598.8	601.8	597.5
177.5°	601.8	598.8	599.2	602.2	598.3
180°	599.6	599.6	599.6	599.6	599.6

(END OF REPORT)