

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: P1029418

Luminaire Tested: S122DIW-B290D710UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029418
REPORT IS A COMBINATION OF REPORTS P985789 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_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

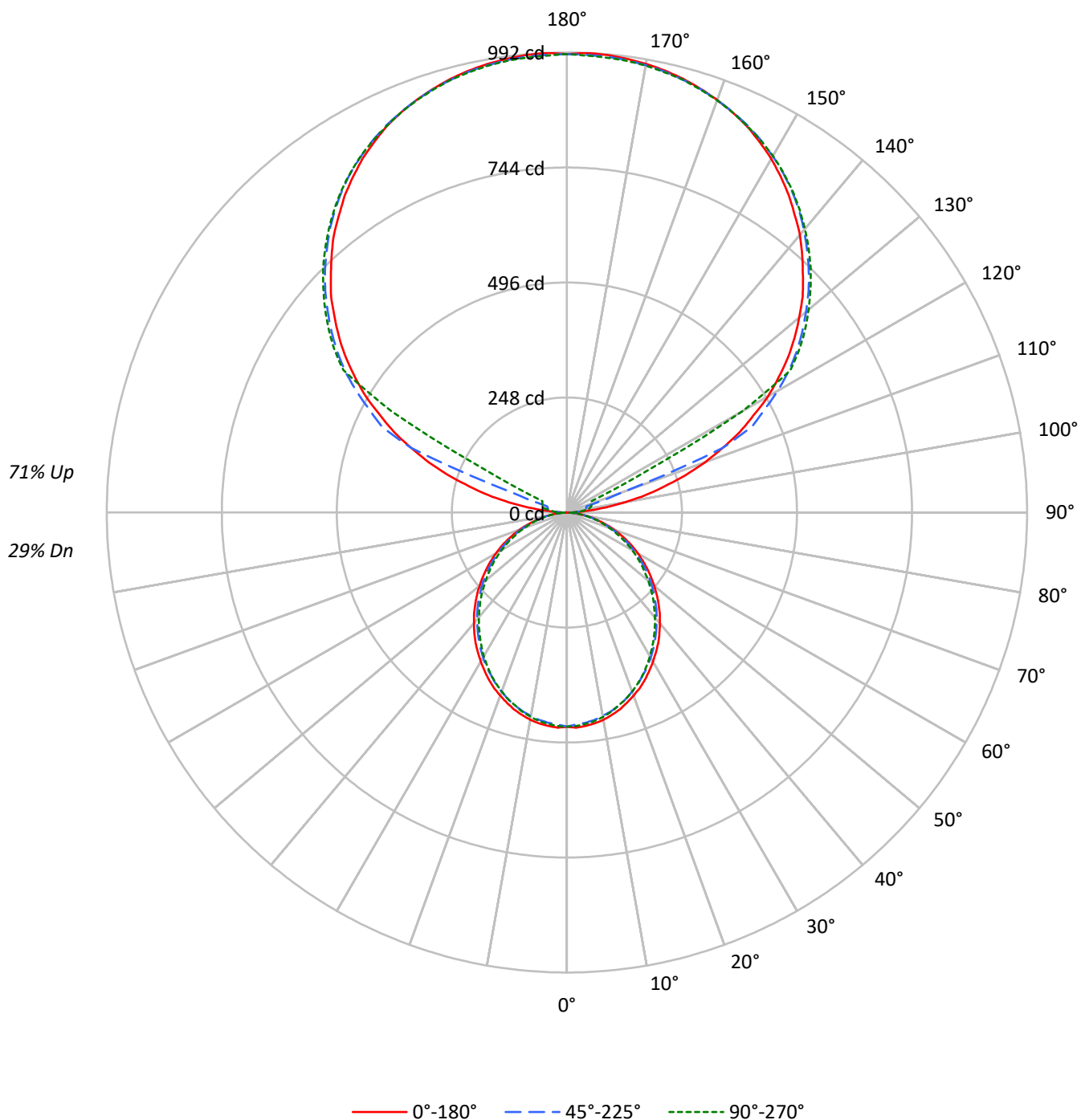
Lumens per Lamp: N/A
Luminaire Lumens: 4074.0 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37			29
1	93	89	85	82	83	80	77	74	63	61	59	47	46	44	32	32	31			24
2	85	78	72	67	76	70	65	60	55	51	48	41	39	37	29	27	26			20
3	77	68	61	55	69	61	55	50	48	44	41	36	34	31	25	24	22			17
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	23	21	19			15
5	65	53	46	40	58	48	41	36	38	33	30	29	26	23	20	18	17			13
6	59	48	40	34	53	43	36	31	34	29	26	26	23	20	18	16	15			11
7	55	43	35	30	49	39	32	27	31	26	23	24	20	18	17	15	13			10
8	51	39	31	26	45	35	29	24	28	23	20	22	18	16	15	13	12			9
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10			8
10	44	32	25	21	39	29	23	19	24	19	16	18	15	13	13	11	9			7

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	1.1
10°-20°	122.3	3.0
20°-30°	179.7	4.4
30°-40°	208.7	5.1
40°-50°	208.5	5.1
50°-60°	181.8	4.5
60°-70°	134.4	3.3
70°-80°	76.0	1.9
80°-90°	21.8	0.5
90°-100°	32.6	0.8
100°-110°	121.5	3.0
110°-120°	322.2	7.9
120°-130°	534.4	13.1
130°-140°	567.6	13.9
140°-150°	527.5	12.9
150°-160°	424.1	10.4
160°-170°	273.3	6.7
170°-180°	94.1	2.3
0°-30°	345.5	8.5
0°-40°	554.2	13.6
0°-60°	944.5	23.2
0°-90°	1176.7	28.9
90°-120°	476.3	11.7
90°-150°	2105.8	51.7
90°-180°	2897.0	71.1
0°-180°	4074.0	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°	1	9	14	18	19	4
95°	46	23	28	32	31	55
105°	217	239	44	52	54	232
115°	411	423	441	110	59	405
125°	581	591	604	609	611	519
135°	719	731	737	744	743	556
145°	834	834	846	851	847	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	

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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°	0.7	8.6	14.3	17.9	19.3
92.5°	17.9	15.0	17.2	18.6	19.3
95°	46.5	22.9	27.9	31.5	30.7
97.5°	83.7	25.0	36.5	38.6	39.3
100°	126.6	28.6	40.8	46.5	47.9
102.5°	173.8	172.3	42.2	50.1	52.2
105°	217.4	238.8	43.6	51.5	54.3
107.5°	268.2	286.0	45.1	52.9	55.8
110°	316.8	331.8	125.1	53.6	56.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	362.6	375.4	363.3	55.1	57.2
115°	411.2	423.3	441.2	110.1	58.6
117.5°	453.4	467.7	479.8	377.6	190.2
120°	500.6	511.3	524.2	532.8	436.2
122.5°	540.6	552.1	566.4	570.7	571.4
125°	581.4	590.7	604.3	609.3	611.4
127.5°	618.6	628.6	639.3	646.5	647.2
130°	653.6	665.0	672.9	680.8	680.1
132.5°	689.4	698.7	706.5	713.0	712.2
135°	719.4	730.8	737.3	744.4	743.0
137.5°	750.9	759.4	766.6	773.7	771.6
140°	781.6	787.3	795.2	801.6	798.1
142.5°	807.3	812.4	821.7	827.4	823.8
145°	834.5	833.8	846.0	851.0	847.4
147.5°	858.1	856.0	868.1	871.7	868.8
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)