

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: P1029432

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-D1_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029432
REPORT IS A COMBINATION OF REPORTS P985854 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D970UB2750-4F0-XX-W2A-D1_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

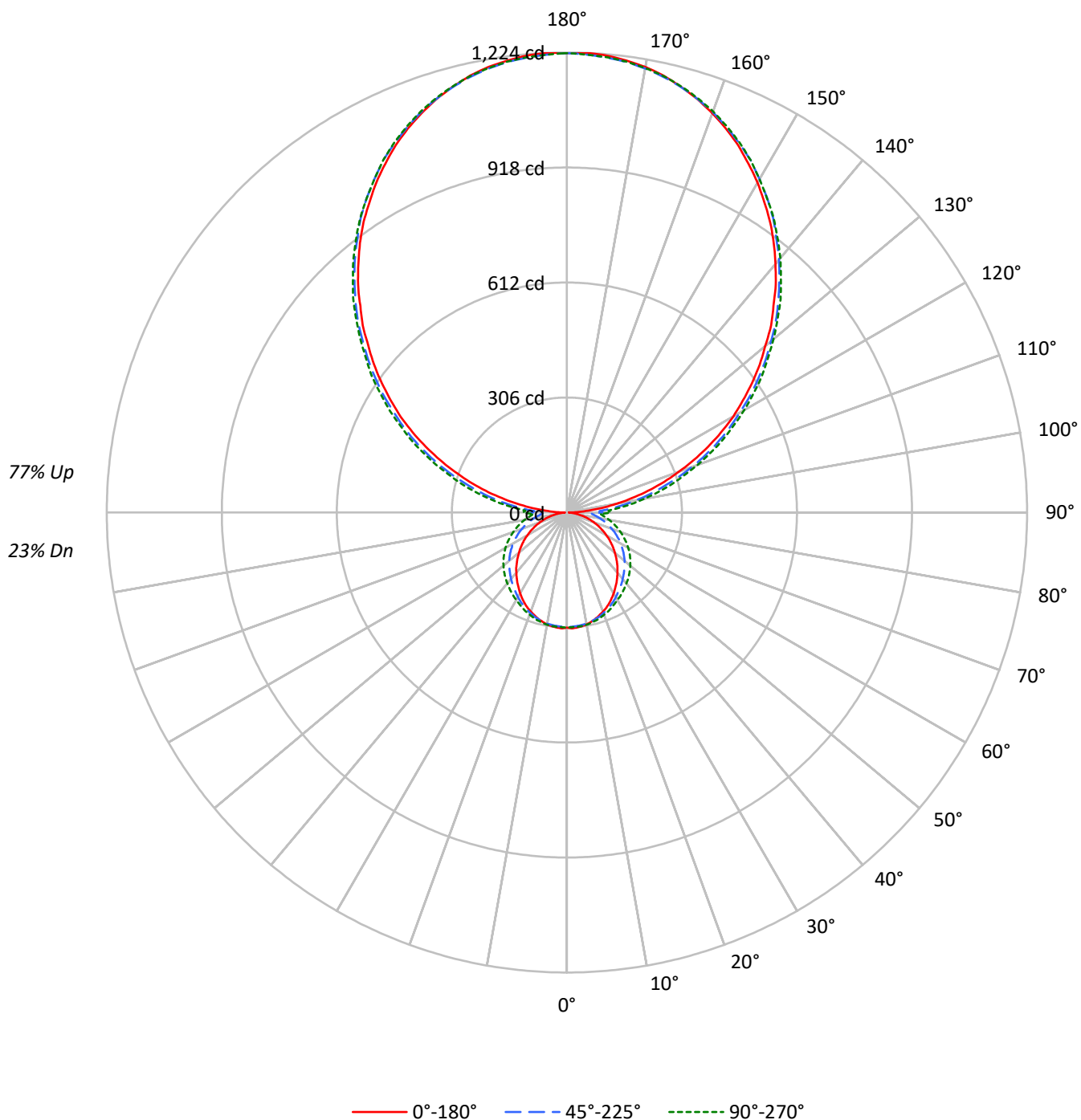
Lumens per Lamp: N/A
Luminaire Lumens: 4590.0 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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: P1029432

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-D1_3500K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31			23
1	91	87	83	79	80	77	73	70	59	56	54	42	40	39	26	25	25			18
2	83	75	69	64	73	67	62	57	51	47	44	36	34	32	23	21	20			14
3	75	66	58	53	66	58	52	47	45	40	37	32	29	27	20	18	17			12
4	68	58	50	44	60	51	45	40	39	35	31	28	25	23	18	16	14			10
5	63	51	43	37	55	46	39	34	35	30	26	25	22	19	16	14	12			8
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11			7
7	53	41	33	28	47	37	30	25	28	23	20	20	17	15	13	11	9			6
8	49	37	30	24	43	33	27	22	26	21	17	18	15	13	12	10	8			6
9	45	34	26	21	40	30	24	19	23	19	15	17	14	11	11	9	8			5
10	42	31	24	19	37	27	21	17	21	17	14	16	12	10	10	8	7			5

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: P1029432

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-D1_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	0.6
10°-20°	83.3	1.8
20°-30°	126.2	2.7
30°-40°	153.7	3.3
40°-50°	165.4	3.6
50°-60°	160.6	3.5
60°-70°	140.2	3.1
70°-80°	108.0	2.4
80°-90°	75.8	1.7
90°-100°	125.5	2.7
100°-110°	276.8	6.0
110°-120°	435.4	9.5
120°-130°	554.3	12.1
130°-140°	612.8	13.4
140°-150°	596.4	13.0
150°-160°	499.5	10.9
160°-170°	331.3	7.2
170°-180°	115.8	2.5
0°-30°	238.5	5.2
0°-40°	392.2	8.5
0°-60°	718.2	15.6
0°-90°	1042.2	22.7
90°-120°	837.7	18.3
90°-150°	2601.3	56.7
90°-180°	3548.0	77.3
0°-180°	4590.0	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	44	95	110	117	6
95°	57	88	117	134	137	63
105°	224	240	265	283	288	237
115°	414	426	443	456	457	410
125°	601	610	622	630	634	537
135°	777	788	795	803	804	601
145°	943	950	956	960	958	589
155°	1078	1081	1084	1089	1086	496
165°	1173	1172	1172	1179	1174	331
175°	1220	1217	1215	1222	1216	116
180°	1222	1222	1222	1222	1222	

TEST NUMBER: P1029432

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-D1_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°	5.4	43.6	94.7	110.4	116.8
92.5°	26.7	58.4	86.6	104.9	110.3
95°	57.2	88.4	117.1	133.9	137.3
97.5°	92.8	121.2	151.2	167.6	172.9
100°	134.1	158.8	186.8	203.2	207.0
102.5°	177.0	197.8	225.9	243.0	246.8
105°	224.0	240.0	265.1	282.7	287.6
107.5°	271.4	286.3	308.5	324.6	324.3
110°	316.4	331.5	353.2	367.4	369.2

TEST NUMBER: P1029432

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-D1_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	365.9	379.2	398.6	409.7	412.5
115°	414.4	425.5	443.3	455.7	457.4
117.5°	462.4	474.2	487.7	498.0	499.3
120°	510.9	520.9	530.5	542.9	544.7
122.5°	555.2	566.1	577.3	586.2	588.1
125°	601.3	610.5	621.6	630.5	633.5
127.5°	646.6	657.5	665.4	672.3	673.2
130°	688.9	701.8	709.2	717.7	717.2
132.5°	736.4	746.2	753.9	759.0	759.5
135°	777.1	788.5	795.1	803.3	803.8
137.5°	822.5	831.8	836.2	843.6	842.5
140°	862.8	871.6	877.7	884.8	883.4
142.5°	904.0	912.9	916.0	922.3	920.4
145°	942.8	950.0	956.2	960.0	958.0
147.5°	977.9	987.2	991.3	993.8	991.0
150°	1014.0	1020.2	1024.3	1027.4	1024.3
152.5°	1046.0	1052.2	1057.3	1061.5	1057.3
155°	1078.0	1081.1	1084.1	1089.3	1086.2
157.5°	1105.8	1107.9	1109.9	1117.2	1112.0
160°	1130.6	1132.6	1133.7	1139.8	1135.7
162.5°	1153.3	1153.3	1154.3	1161.5	1156.4
165°	1172.9	1171.8	1171.8	1179.0	1173.9
167.5°	1190.4	1187.3	1187.3	1194.5	1189.4
170°	1203.8	1200.7	1199.7	1206.9	1200.7
172.5°	1213.1	1210.0	1209.0	1216.2	1210.0
175°	1220.3	1217.2	1215.2	1222.4	1216.2
177.5°	1224.4	1221.3	1219.3	1225.5	1219.3
180°	1222.4	1222.4	1222.4	1222.4	1222.4

(END OF REPORT)