

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: P1029433

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-D1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029433
REPORT IS A COMBINATION OF REPORTS P985855 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_4000K
Description: Define 2 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

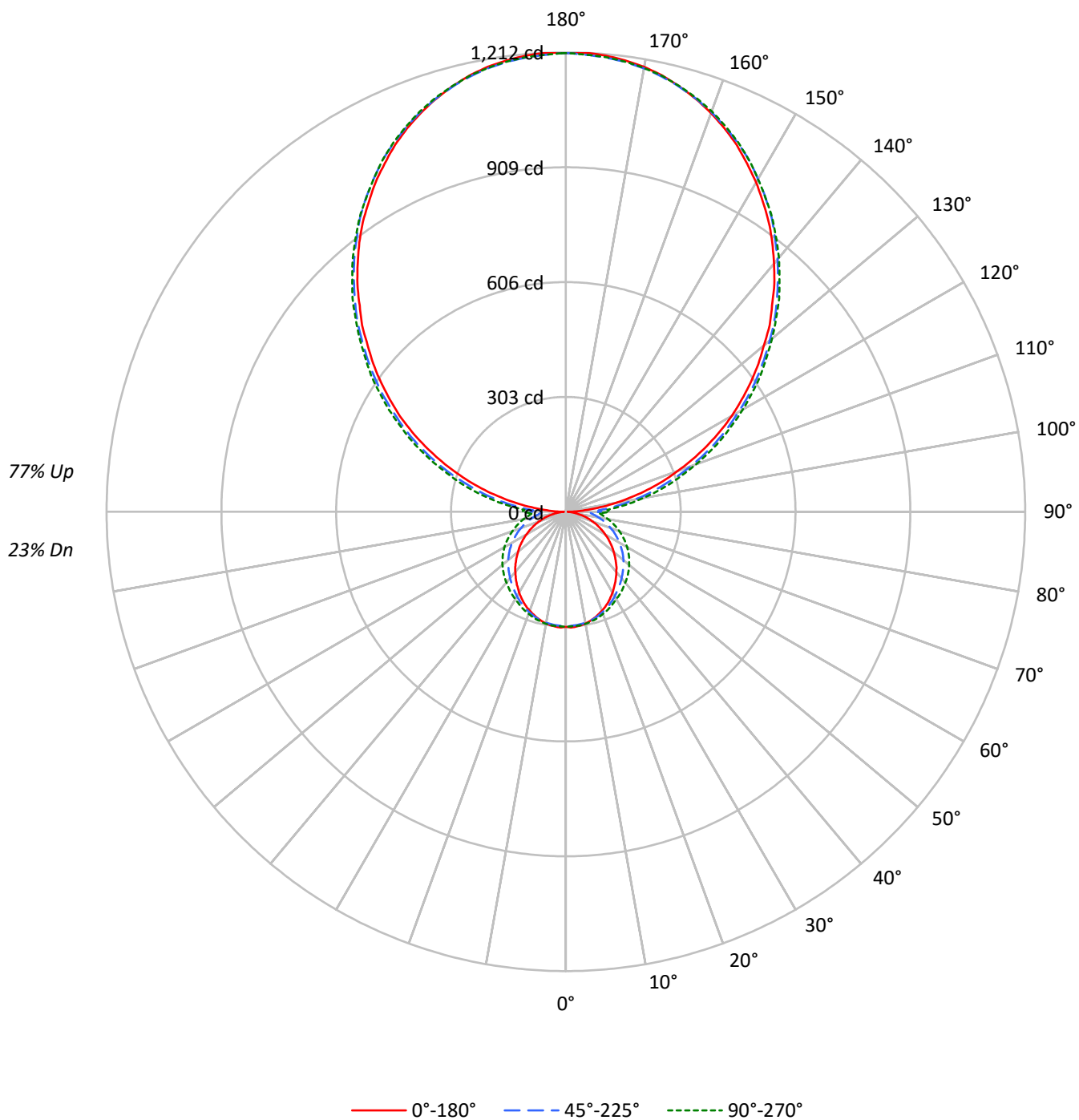
Lumens per Lamp: N/A
Luminaire Lumens: 4545.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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
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°	4804	4804	4804
5°	4826	4599	4573
10°	4793	4439	4375
15°	4726	4275	4172
20°	4641	4101	3979
25°	4556	3936	3803
30°	4438	3767	3631
35°	4319	3605	3504
40°	4194	3465	3377
45°	4073	3338	3267
50°	3943	3221	3159
55°	3808	3097	3048
60°	3644	2967	2931
65°	3470	2816	2797
70°	3278	2657	2654
75°	3026	2497	2517
80°	2635	2330	2376
85°	2232	2174	2255

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4073 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.8	0.6
10°-20°	82.5	1.8
20°-30°	125.0	2.8
30°-40°	152.2	3.3
40°-50°	163.8	3.6
50°-60°	159.1	3.5
60°-70°	138.9	3.1
70°-80°	106.9	2.4
80°-90°	75.1	1.7
90°-100°	124.3	2.7
100°-110°	274.1	6.0
110°-120°	431.1	9.5
120°-130°	548.9	12.1
130°-140°	606.8	13.3
140°-150°	590.5	13.0
150°-160°	494.5	10.9
160°-170°	328.0	7.2
170°-180°	114.6	2.5
0°-30°	236.3	5.2
0°-40°	388.5	8.5
0°-60°	711.5	15.7
0°-90°	1032.4	22.7
90°-120°	829.4	18.2
90°-150°	2575.5	56.7
90°-180°	3513.0	77.3
0°-180°	4545.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	304	304	304	304	304	
5°	304	303	300	303	303	29
15°	290	291	291	295	295	82
25°	264	267	271	276	278	121
35°	227	235	243	253	256	142
45°	186	198	214	227	232	144
55°	143	159	182	198	203	128
65°	98	119	145	163	169	97
75°	54	79	107	126	132	57
85°	16	43	71	90	96	17
90°	5	43	94	109	116	6
95°	57	88	116	133	136	62
105°	222	238	262	280	285	234
115°	410	421	439	451	453	406
125°	595	604	616	624	627	532
135°	769	781	787	795	796	595
145°	934	941	947	950	948	583
155°	1067	1070	1073	1078	1075	491
165°	1161	1160	1160	1167	1162	328
175°	1208	1205	1203	1210	1204	115
180°	1210	1210	1210	1210	1210	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	303.5	303.5	303.5	303.5	303.5
2.5°	305.7	304.4	301.3	303.5	302.6
5°	304.4	303.0	300.4	303.0	302.6
7.5°	302.2	301.3	299.1	302.2	301.7
10°	299.5	298.6	297.3	300.8	300.4
12.5°	295.1	295.6	294.7	298.2	297.8
15°	290.3	291.2	291.2	295.1	294.7
17.5°	284.1	285.9	287.2	291.2	291.2
20°	278.0	280.2	281.9	286.8	286.8
22.5°	271.4	274.0	276.7	281.5	282.4
25°	263.9	267.0	270.9	276.2	277.5
27.5°	255.1	259.9	264.3	270.9	271.8
30°	246.3	252.0	257.7	264.8	266.1
32.5°	236.6	243.2	250.3	258.6	261.3
35°	227.4	234.9	243.2	252.9	256.0
37.5°	217.3	225.6	236.2	246.7	249.8
40°	207.2	216.8	228.7	240.2	244.1
42.5°	197.5	207.2	221.2	234.0	238.0
45°	186.5	198.4	213.8	227.4	231.8
47.5°	175.9	188.7	206.3	220.4	225.2
50°	164.9	178.6	198.4	213.3	218.2
52.5°	154.4	168.9	190.0	205.4	210.7
55°	142.9	158.8	181.7	197.5	203.2
57.5°	132.0	149.5	172.4	189.6	195.3
60°	120.1	139.0	164.1	180.8	186.9
62.5°	109.5	129.3	154.4	172.4	178.1
65°	97.6	119.2	145.1	163.2	168.9
67.5°	87.1	109.5	135.9	153.9	160.1
70°	75.7	98.5	125.8	144.7	150.0
72.5°	65.1	88.8	116.6	135.0	141.6
75°	54.1	78.7	106.9	125.8	131.5
77.5°	43.5	69.1	97.6	116.6	122.7
80°	33.0	59.8	88.4	106.9	113.0
82.5°	24.2	50.6	79.6	98.1	103.8
85°	15.8	43.1	71.3	89.7	95.9
87.5°	9.7	36.1	64.2	82.2	88.0
90°	5.4	43.2	93.8	109.4	115.6
92.5°	26.5	57.9	85.8	104.0	109.2
95°	56.6	87.5	116.0	132.7	135.9
97.5°	92.0	120.0	149.6	165.9	171.2
100°	132.8	157.3	184.9	201.2	205.0
102.5°	175.2	195.9	223.7	240.5	244.4
105°	221.8	237.6	262.5	279.9	284.8
107.5°	268.8	283.4	305.3	321.4	321.1
110°	313.3	328.2	349.7	363.8	365.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	362.3	375.4	394.6	405.7	408.4
115°	410.3	421.2	439.0	451.2	452.9
117.5°	457.8	469.5	482.9	493.0	494.4
120°	505.8	515.8	525.2	537.5	539.3
122.5°	549.7	560.4	571.5	580.4	582.3
125°	595.3	604.5	615.5	624.3	627.2
127.5°	640.2	651.0	658.8	665.7	666.6
130°	682.1	694.9	702.1	710.6	710.1
132.5°	729.1	738.8	746.4	751.5	751.9
135°	769.4	780.7	787.1	795.4	795.8
137.5°	814.4	823.6	827.8	835.2	834.2
140°	854.2	863.0	869.0	876.0	874.6
142.5°	895.0	903.8	906.9	913.2	911.3
145°	933.5	940.6	946.7	950.4	948.5
147.5°	968.2	977.4	981.5	983.9	981.2
150°	1003.9	1010.1	1014.1	1017.2	1014.1
152.5°	1035.6	1041.7	1046.8	1050.9	1046.8
155°	1067.2	1070.3	1073.4	1078.5	1075.4
157.5°	1094.8	1096.9	1098.9	1106.1	1100.9
160°	1119.3	1121.4	1122.4	1128.5	1124.4
162.5°	1141.8	1141.8	1142.8	1150.0	1144.9
165°	1161.2	1160.2	1160.2	1167.3	1162.2
167.5°	1178.6	1175.5	1175.5	1182.6	1177.5
170°	1191.8	1188.8	1187.8	1194.9	1188.8
172.5°	1201.0	1198.0	1196.9	1204.1	1198.0
175°	1208.2	1205.1	1203.1	1210.2	1204.1
177.5°	1212.3	1209.2	1207.2	1213.3	1207.2
180°	1210.2	1210.2	1210.2	1210.2	1210.2

(END OF REPORT)