

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: P1029437

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-D_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029437
REPORT IS A COMBINATION OF REPORTS P985865 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-D_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

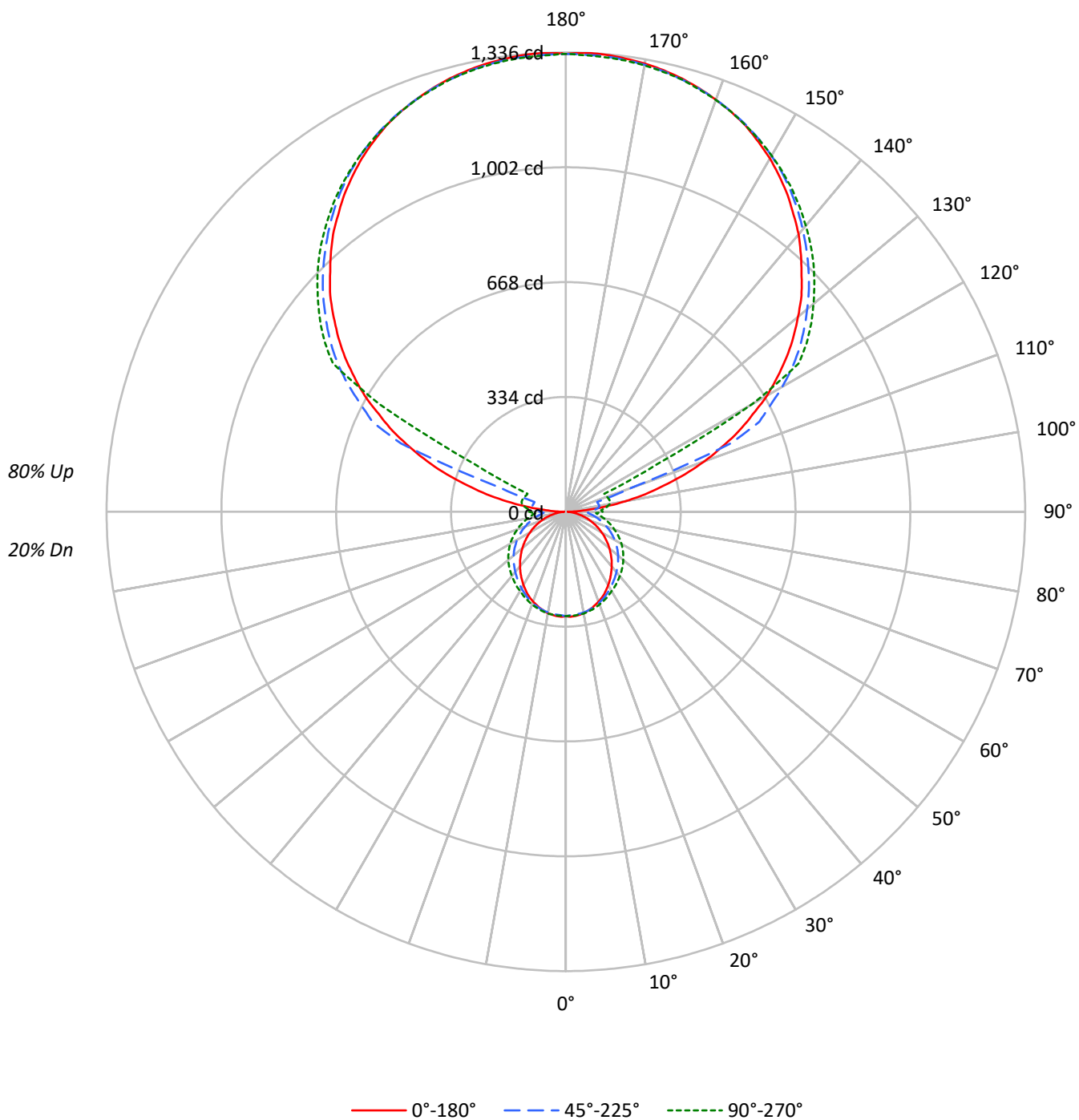
Lumens per Lamp: N/A
Luminaire Lumens: 5064.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	29	29	29
1	91	86	82	79	80	76	73	70	57	55	53	40	39	38	25	24	23	23	23	16
2	82	75	69	64	72	66	61	57	50	47	44	35	33	31	21	20	19	19	19	13
3	75	65	58	53	66	58	52	47	44	40	36	31	28	26	19	17	16	16	16	11
4	68	58	50	44	60	51	45	40	39	34	31	27	24	22	16	15	13	13	13	9
5	62	51	43	37	55	45	39	34	34	30	26	24	21	19	15	13	12	12	12	8
6	57	46	38	32	50	40	34	29	31	26	22	22	19	16	13	11	10	10	10	7
7	53	41	33	28	46	36	30	25	28	23	20	20	16	14	12	10	9	9	9	6
8	49	37	29	24	43	33	26	22	25	20	17	18	15	12	11	9	8	8	8	5
9	45	33	26	21	40	30	24	19	23	18	15	16	13	11	10	8	7	7	7	5
10	42	30	24	19	37	27	21	17	21	16	13	15	12	10	9	8	6	6	6	4

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	1.6
20°-30°	125.0	2.5
30°-40°	152.2	3.0
40°-50°	163.8	3.2
50°-60°	159.1	3.1
60°-70°	138.9	2.7
70°-80°	106.9	2.1
80°-90°	74.0	1.5
90°-100°	93.3	1.8
100°-110°	199.8	3.9
110°-120°	457.9	9.0
120°-130°	733.3	14.5
130°-140°	770.3	15.2
140°-150°	711.7	14.1
150°-160°	571.4	11.3
160°-170°	368.2	7.3
170°-180°	126.7	2.5
0°-30°	236.3	4.7
0°-40°	388.5	7.7
0°-60°	711.5	14.0
0°-90°	1031.3	20.4
90°-120°	751.0	14.8
90°-150°	2966.3	58.6
90°-180°	4033.0	79.6
0°-180°	5064.0	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	42	77	100	107	7
95°	66	55	88	110	114	77
105°	295	337	97	123	131	315
115°	556	577	621	188	123	547
125°	784	797	829	848	855	700
135°	970	985	998	1017	1019	749
145°	1124	1123	1140	1149	1146	703
155°	1238	1229	1241	1247	1239	571
165°	1305	1299	1302	1308	1302	369
175°	1334	1328	1330	1336	1327	127
180°	1332	1332	1332	1332	1332	

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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	41.5	77.4	99.8	106.9
92.5°	28.1	47.5	77.2	96.4	102.5
95°	66.1	55.0	88.2	109.7	114.0
97.5°	115.8	55.7	96.6	115.8	122.1
100°	173.6	57.9	98.9	122.9	129.7
102.5°	236.7	249.4	97.7	124.1	131.9
105°	295.1	336.8	96.6	122.6	131.3
107.5°	363.5	398.2	95.4	121.0	129.7
110°	428.6	457.7	200.7	118.5	127.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	490.3	514.6	518.5	117.3	125.0
115°	555.8	577.0	620.9	188.0	123.4
117.5°	612.2	634.9	669.8	545.2	297.2
120°	675.7	692.0	726.9	750.8	625.5
122.5°	729.7	745.6	781.1	798.8	803.7
125°	784.2	796.8	829.2	847.7	854.6
127.5°	834.3	847.3	873.7	894.3	899.3
130°	881.5	896.5	916.4	937.5	940.1
132.5°	929.7	941.7	958.9	977.8	980.3
135°	969.7	985.1	998.2	1017.1	1018.7
137.5°	1012.1	1023.6	1035.5	1053.5	1053.7
140°	1053.5	1060.8	1072.3	1088.0	1085.9
142.5°	1088.2	1094.5	1107.1	1120.1	1117.5
145°	1124.4	1123.4	1139.8	1149.2	1146.5
147.5°	1156.2	1153.3	1169.7	1174.9	1172.5
150°	1187.0	1180.3	1195.7	1201.5	1196.7
152.5°	1213.0	1205.3	1219.8	1225.6	1218.8
155°	1238.1	1229.4	1241.0	1246.8	1239.1
157.5°	1258.3	1250.6	1259.3	1266.0	1258.3
160°	1275.7	1269.9	1275.7	1281.5	1274.7
162.5°	1291.1	1285.3	1290.1	1296.9	1288.2
165°	1304.6	1298.8	1301.7	1308.4	1301.7
167.5°	1315.2	1309.4	1312.3	1319.0	1310.4
170°	1323.8	1318.1	1320.0	1326.7	1318.1
172.5°	1329.6	1323.8	1325.8	1332.5	1323.8
175°	1334.4	1327.7	1329.6	1336.4	1326.7
177.5°	1336.4	1329.6	1330.6	1337.3	1328.7
180°	1331.6	1331.6	1331.6	1331.6	1331.6

(END OF REPORT)