

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: P1029446

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029446
REPORT IS A COMBINATION OF REPORTS P985880 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-F_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

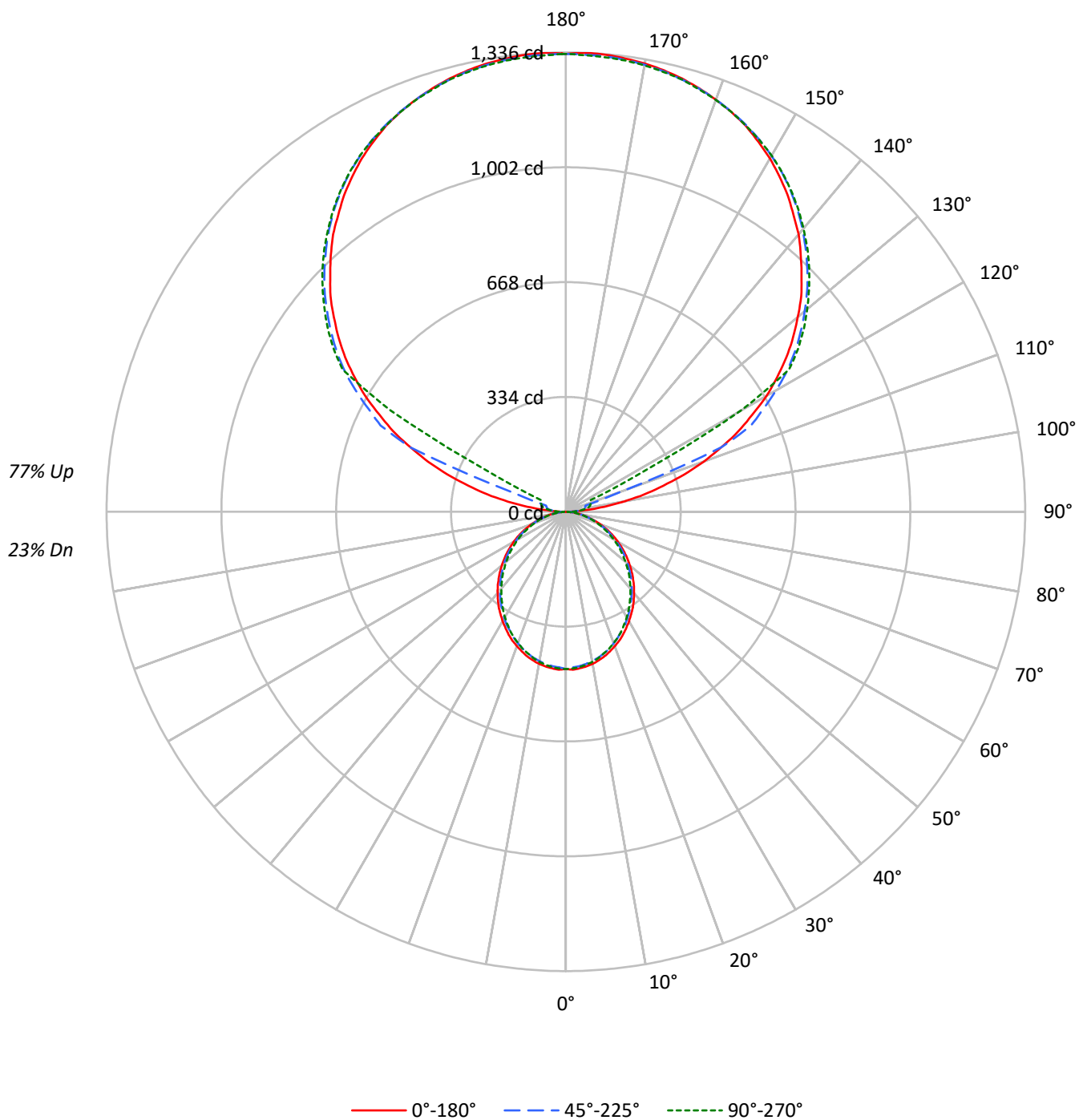
Lumens per Lamp: N/A
Luminaire Lumens: 5069.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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	31	31	23
1	92	88	84	80	81	78	75	72	60	58	56	43	42	41	28	27	26	26	26	19
2	83	76	71	66	74	68	63	59	52	49	46	38	36	34	24	23	22	22	22	16
3	76	67	60	55	67	60	54	49	46	42	39	33	31	29	22	20	19	19	19	14
4	70	59	52	46	61	53	46	42	41	36	33	30	27	24	19	18	16	16	16	12
5	64	53	45	39	56	47	40	35	36	32	28	26	23	21	17	15	14	14	14	10
6	58	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12	12	12	9
7	54	42	35	29	48	38	31	27	29	25	21	22	18	16	14	12	11	11	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	10	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	9	9	6
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7236	7236	7236
5°	7247	6897	6849
10°	7189	6583	6453
15°	7083	6266	6036
20°	6941	5921	5641
25°	6799	5561	5247
30°	6622	5223	4834
35°	6453	4866	4428
40°	6246	4515	4044
45°	6039	4166	3667
50°	5813	3811	3278
55°	5574	3431	2907
60°	5307	3019	2523
65°	5016	2603	2118
70°	4643	2144	1711
75°	4128	1654	1321
80°	3513	1123	849
85°	2543	521	362

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6039 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	0.8
10°-20°	121.1	2.4
20°-30°	177.9	3.5
30°-40°	206.6	4.1
40°-50°	206.4	4.1
50°-60°	179.9	3.5
60°-70°	133.0	2.6
70°-80°	75.3	1.5
80°-90°	22.2	0.4
90°-100°	43.9	0.9
100°-110°	163.7	3.2
110°-120°	434.1	8.6
120°-130°	720.0	14.2
130°-140°	764.8	15.1
140°-150°	710.8	14.0
150°-160°	571.4	11.3
160°-170°	368.2	7.3
170°-180°	126.7	2.5
0°-30°	342.0	6.7
0°-40°	548.6	10.8
0°-60°	934.9	18.4
0°-90°	1165.3	23.0
90°-120°	641.7	12.7
90°-150°	2837.2	56.0
90°-180°	3904.0	77.0
0°-180°	5069.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	457	457	457	457	457	
5°	457	455	450	454	453	43
15°	435	432	427	429	426	123
25°	394	390	383	384	383	181
35°	340	335	328	326	324	212
45°	276	273	267	262	260	213
55°	209	207	201	196	194	187
65°	141	138	134	130	128	139
75°	74	73	71	68	69	79
85°	18	18	17	16	15	20
90°	1	12	19	24	26	5
95°	63	31	38	42	41	74
105°	293	322	59	69	73	313
115°	554	570	594	148	79	545
125°	783	796	814	821	824	699
135°	969	985	993	1003	1001	749
145°	1124	1123	1140	1147	1142	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°	457.1	457.1	457.1	457.1	457.1
2.5°	459.8	457.6	452.7	457.1	456.2
5°	457.1	455.4	450.5	454.0	453.2
7.5°	454.0	451.4	446.6	450.1	449.2
10°	449.2	446.1	440.9	444.4	443.1
12.5°	442.6	440.0	434.7	436.9	436.0
15°	435.1	432.5	426.8	428.6	426.4
17.5°	425.9	423.3	417.6	419.8	417.6
20°	415.8	413.2	407.0	408.3	406.6
22.5°	405.7	401.7	396.0	396.0	395.1
25°	393.8	390.3	382.8	383.7	382.8
27.5°	380.6	377.6	371.9	370.5	368.3
30°	367.5	363.9	357.3	356.0	354.3
32.5°	353.4	350.8	343.7	341.1	339.3
35°	339.8	335.4	328.3	325.7	323.5
37.5°	324.4	320.4	313.4	310.3	308.1
40°	308.6	305.0	298.0	294.1	292.3
42.5°	293.2	289.7	282.6	278.2	275.6
45°	276.5	273.4	266.8	262.0	260.2
47.5°	260.2	257.1	250.1	245.3	242.6
50°	243.1	240.9	234.7	228.6	226.4
52.5°	226.4	223.3	217.6	212.7	209.7
55°	209.2	206.6	201.3	196.0	193.8
57.5°	192.1	189.9	184.2	178.9	177.1
60°	174.9	173.2	167.0	162.2	160.9
62.5°	158.2	155.2	150.8	146.4	144.6
65°	141.1	138.5	134.1	130.1	127.9
67.5°	123.5	121.3	117.4	114.3	112.5
70°	107.2	105.5	101.5	98.5	96.7
72.5°	90.5	88.8	86.6	83.5	82.2
75°	73.8	73.0	70.8	68.1	69.0
77.5°	58.9	57.1	56.3	54.9	53.6
80°	44.0	43.5	42.6	41.3	40.4
82.5°	29.9	29.9	29.4	27.7	27.7
85°	18.0	17.6	17.1	15.8	15.4
87.5°	7.9	7.0	6.2	4.8	4.4
90°	1.0	11.6	19.3	24.1	26.0
92.5°	24.1	20.2	23.1	25.1	26.0
95°	62.6	30.8	37.6	42.4	41.4
97.5°	112.7	33.7	49.1	52.0	53.0
100°	170.5	38.5	54.9	62.6	64.6
102.5°	234.1	232.2	56.8	67.4	70.3
105°	292.9	321.8	58.8	69.4	73.2
107.5°	361.3	385.4	60.7	71.3	75.2
110°	426.8	447.1	168.6	72.3	76.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.5	505.8	489.5	74.2	77.1
115°	554.0	570.4	594.5	148.4	79.0
117.5°	610.9	630.1	646.5	508.7	256.3
120°	674.4	688.9	706.2	717.8	587.7
122.5°	728.4	743.8	763.1	768.9	769.8
125°	783.3	795.9	814.2	820.9	823.8
127.5°	833.4	846.9	861.4	871.0	872.0
130°	880.6	896.1	906.7	917.3	916.3
132.5°	928.8	941.3	951.9	960.6	959.6
135°	969.3	984.7	993.4	1003.0	1001.1
137.5°	1011.7	1023.2	1032.9	1042.5	1039.6
140°	1053.1	1060.8	1071.4	1080.1	1075.3
142.5°	1087.8	1094.5	1107.1	1114.8	1110.0
145°	1124.4	1123.4	1139.8	1146.6	1141.7
147.5°	1156.2	1153.3	1169.7	1174.5	1170.7
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)