

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: P1029324

Luminaire Tested: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029324
REPORT IS A COMBINATION OF REPORTS P985510 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_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

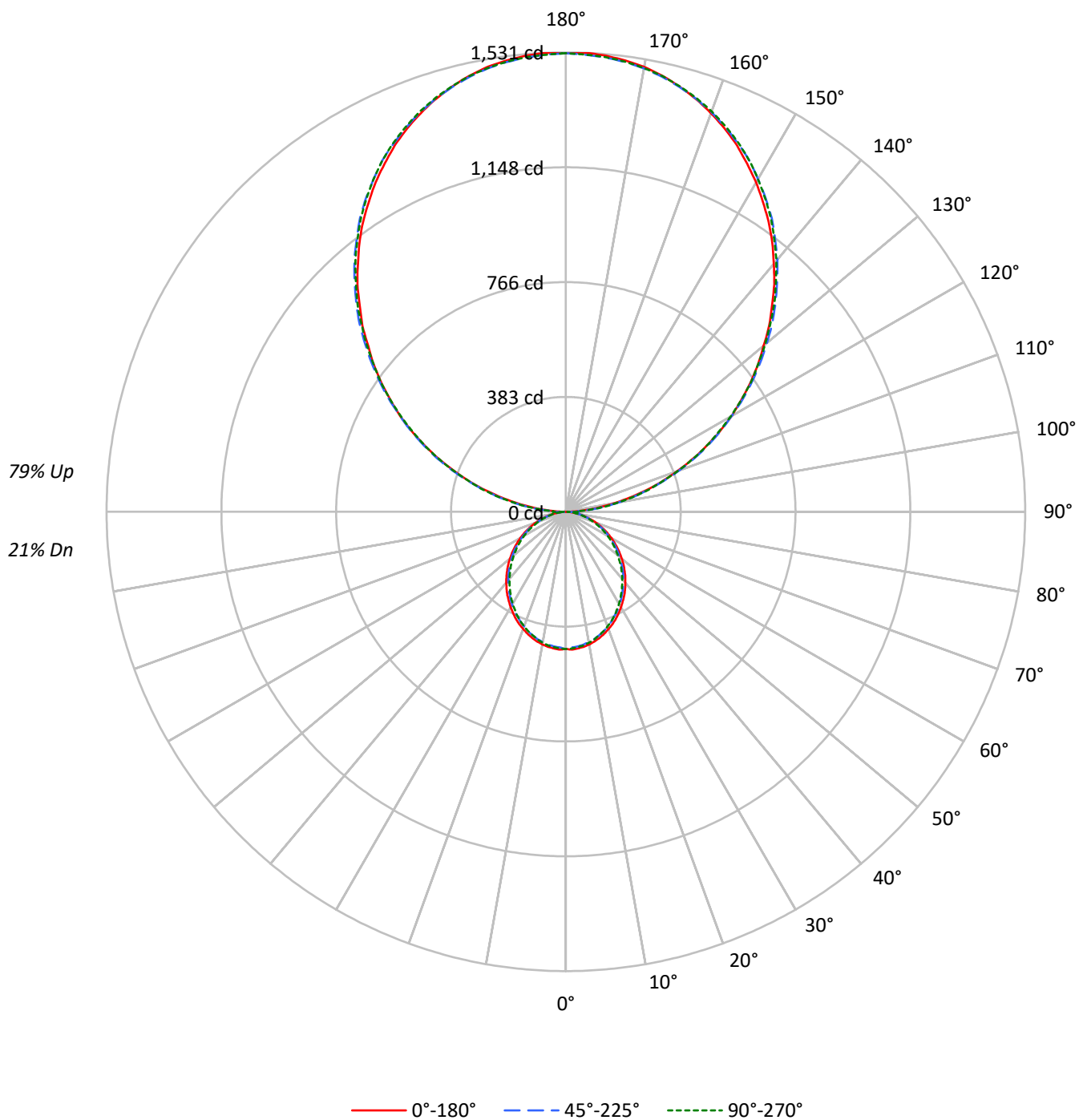
Lumens per Lamp: N/A
Luminaire Lumens: 5441.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21		
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25	18		
2	83	76	70	65	73	68	63	59	52	48	46	37	35	33	23	22	21	15		
3	76	67	60	54	67	59	54	49	45	41	38	33	30	28	21	19	18	13		
4	69	59	51	46	61	52	46	41	40	36	32	29	26	24	18	17	15	11		
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	16	15	13	10		
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	8		
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	10	7		
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	11	9	7		
9	46	34	27	23	41	31	25	20	24	20	16	18	15	12	11	10	8	6		
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	5		

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	2.2
20°-30°	177.9	3.3
30°-40°	206.6	3.8
40°-50°	206.4	3.8
50°-60°	179.9	3.3
60°-70°	133.0	2.4
70°-80°	75.3	1.4
80°-90°	24.2	0.4
90°-100°	94.6	1.7
100°-110°	300.6	5.5
110°-120°	514.4	9.5
120°-130°	676.5	12.4
130°-140°	759.3	14.0
140°-150°	744.6	13.7
150°-160°	624.6	11.5
160°-170°	414.3	7.6
170°-180°	144.8	2.7
0°-30°	342.0	6.3
0°-40°	548.6	10.1
0°-60°	934.9	17.2
0°-90°	1167.3	21.5
90°-120°	909.5	16.7
90°-150°	3090.0	56.8
90°-180°	4274.0	78.6
0°-180°	5441.0	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	17	45	43	44	5
95°	67	80	83	83	80	75
105°	277	281	284	286	286	293
115°	516	524	521	520	516	510
125°	751	762	758	755	753	671
135°	971	986	988	987	983	751
145°	1179	1188	1196	1197	1192	737
155°	1348	1352	1356	1362	1358	621
165°	1467	1465	1465	1474	1468	414
175°	1526	1522	1520	1529	1521	145
180°	1529	1529	1529	1529	1529	

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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°	1.3	16.8	45.1	42.6	43.9
92.5°	28.4	38.7	40.0	41.3	41.3
95°	67.1	80.0	82.6	82.6	80.0
97.5°	112.2	123.8	129.0	129.0	129.0
100°	163.8	174.1	178.0	178.0	176.7
102.5°	218.0	225.7	230.9	232.2	230.9
105°	277.3	281.2	283.8	286.4	286.4
107.5°	336.7	341.8	341.8	343.1	336.7
110°	393.4	401.2	401.2	401.2	397.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	455.4	463.1	461.8	457.9	455.4
115°	516.0	523.7	521.1	519.8	516.0
117.5°	576.6	586.9	580.5	576.6	572.7
120°	637.2	647.6	637.2	637.2	633.4
122.5°	692.7	705.6	699.2	695.3	692.7
125°	750.8	762.4	758.5	754.6	753.3
127.5°	807.5	821.7	816.5	811.4	807.5
130°	860.4	877.2	874.6	872.0	866.8
132.5°	919.7	932.6	933.9	927.5	923.6
135°	971.3	985.5	988.1	986.8	982.9
137.5°	1028.1	1039.7	1042.3	1041.0	1035.8
140°	1078.4	1090.0	1096.5	1096.5	1091.3
142.5°	1130.0	1141.6	1145.5	1146.8	1141.6
145°	1179.0	1188.0	1195.8	1197.1	1191.9
147.5°	1222.9	1234.5	1239.6	1242.2	1237.1
150°	1268.0	1275.8	1280.9	1284.8	1280.9
152.5°	1308.0	1315.7	1322.2	1327.4	1322.2
155°	1348.0	1351.9	1355.7	1362.2	1358.3
157.5°	1382.8	1385.4	1388.0	1397.0	1390.6
160°	1413.8	1416.4	1417.7	1425.4	1420.2
162.5°	1442.2	1442.2	1443.5	1452.5	1446.0
165°	1466.7	1465.4	1465.4	1474.4	1468.0
167.5°	1488.6	1484.7	1484.7	1493.8	1487.3
170°	1505.4	1501.5	1500.2	1509.2	1501.5
172.5°	1517.0	1513.1	1511.8	1520.9	1513.1
175°	1526.0	1522.1	1519.6	1528.6	1520.9
177.5°	1531.2	1527.3	1524.7	1532.5	1524.7
180°	1528.6	1528.6	1528.6	1528.6	1528.6

(END OF REPORT)