

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: P1029354

Luminaire Tested: S122DIW-B290D1440UB2750-4F0-XX-W2A-F1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029354
REPORT IS A COMBINATION OF REPORTS P985600 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D1440UB2750-4F0-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

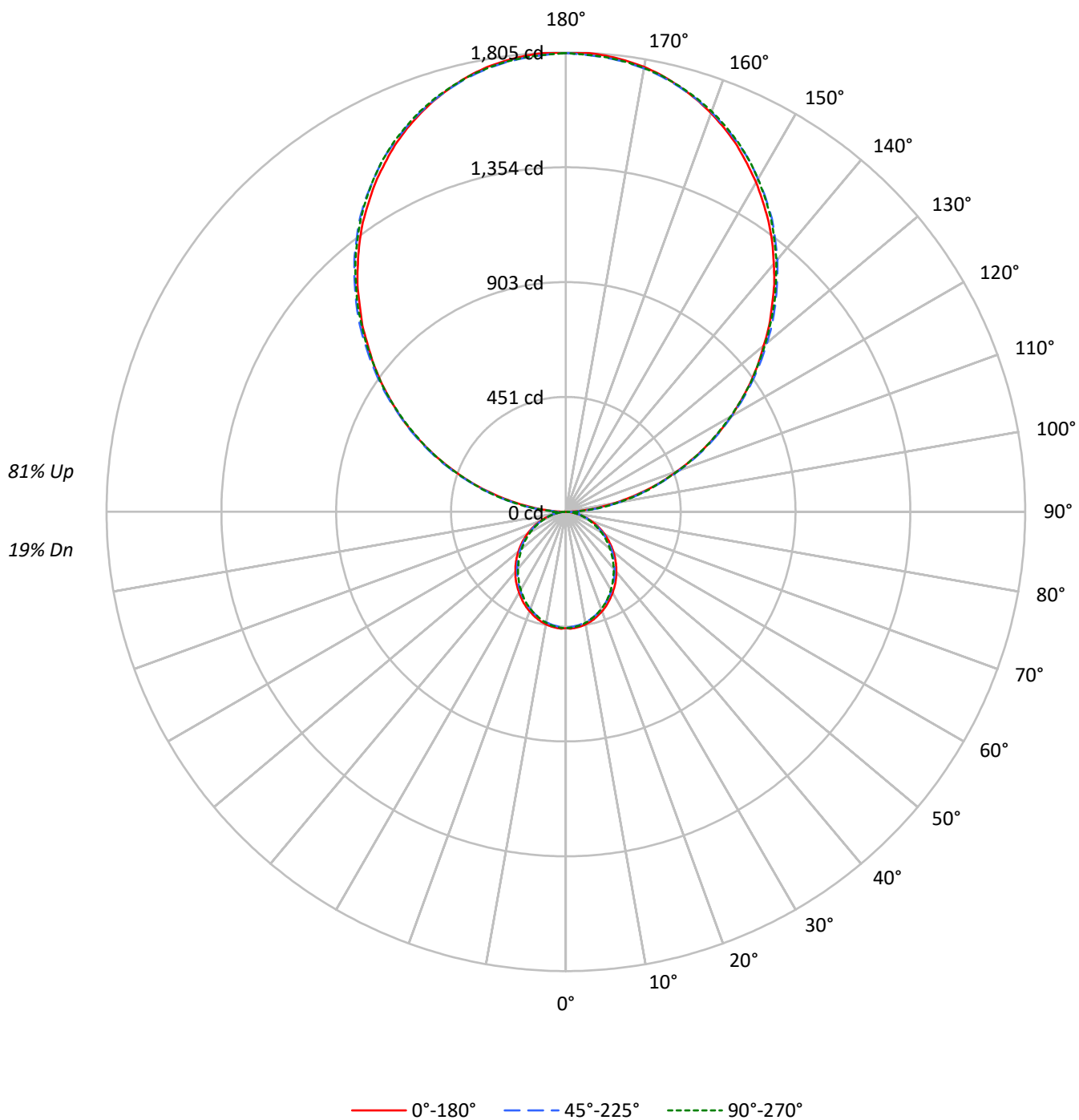
Lumens per Lamp: N/A
Luminaire Lumens: 6207.0 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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	88	88	88	88	66	66	66	46	46	46	27	27	27	19		
1	91	87	83	80	80	77	73	71	58	56	54	40	39	38	24	24	23	16		
2	83	76	70	65	73	67	62	58	50	47	44	35	33	32	21	20	19	13		
3	75	66	59	54	66	59	53	48	44	41	37	31	29	27	19	18	17	11		
4	69	59	51	45	60	52	46	41	39	35	32	28	25	23	17	15	14	10		
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	15	14	12	8		
6	58	46	39	33	51	41	35	30	31	27	23	22	19	17	14	12	11	7		
7	53	42	34	29	47	37	31	26	28	24	20	20	17	15	12	11	10	7		
8	49	38	30	25	43	34	27	23	26	21	18	18	15	13	11	10	9	6		
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	8	5		
10	43	31	24	20	38	28	22	18	21	17	14	15	13	11	10	8	7	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	0.7
10°-20°	121.1	2.0
20°-30°	177.9	2.9
30°-40°	206.6	3.3
40°-50°	206.4	3.3
50°-60°	179.9	2.9
60°-70°	133.0	2.1
70°-80°	75.3	1.2
80°-90°	25.0	0.4
90°-100°	111.5	1.8
100°-110°	354.4	5.7
110°-120°	606.5	9.8
120°-130°	797.6	12.8
130°-140°	895.3	14.4
140°-150°	878.0	14.1
150°-160°	736.5	11.9
160°-170°	488.4	7.9
170°-180°	170.7	2.8
0°-30°	342.0	5.5
0°-40°	548.6	8.8
0°-60°	934.9	15.1
0°-90°	1168.1	18.8
90°-120°	1072.4	17.3
90°-150°	3643.2	58.7
90°-180°	5039.0	81.2
0°-180°	6207.0	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°	2	20	53	50	52	6
95°	79	94	97	97	94	88
105°	327	332	335	338	338	345
115°	608	618	614	613	608	602
125°	885	899	894	890	888	791
135°	1145	1162	1165	1164	1159	885
145°	1390	1401	1410	1411	1405	869
155°	1589	1594	1598	1606	1602	732
165°	1729	1728	1728	1738	1731	488
175°	1799	1795	1792	1802	1793	171
180°	1802	1802	1802	1802	1802	

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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°	1.5	19.8	53.2	50.2	51.7
92.5°	33.5	45.6	47.1	48.7	48.7
95°	79.1	94.3	97.3	97.3	94.3
97.5°	132.3	146.0	152.1	152.1	152.1
100°	193.2	205.3	209.9	209.9	208.4
102.5°	257.0	266.2	272.2	273.8	272.2
105°	327.0	331.6	334.6	337.6	337.6
107.5°	397.0	403.0	403.0	404.6	397.0
110°	463.9	473.0	473.0	473.0	468.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	536.9	546.0	544.5	539.9	536.9
115°	608.4	617.5	614.5	612.9	608.4
117.5°	679.9	692.0	684.4	679.9	675.3
120°	751.3	763.5	751.3	751.3	746.8
122.5°	816.7	831.9	824.3	819.8	816.7
125°	885.2	898.9	894.3	889.7	888.2
127.5°	952.1	968.8	962.7	956.7	952.1
130°	1014.5	1034.2	1031.2	1028.1	1022.1
132.5°	1084.4	1099.6	1101.1	1093.5	1089.0
135°	1145.3	1162.0	1165.0	1163.5	1158.9
137.5°	1212.2	1225.9	1228.9	1227.4	1221.3
140°	1271.5	1285.2	1292.8	1292.8	1286.7
142.5°	1332.3	1346.0	1350.6	1352.1	1346.0
145°	1390.1	1400.8	1409.9	1411.4	1405.3
147.5°	1441.8	1455.5	1461.6	1464.6	1458.6
150°	1495.1	1504.2	1510.3	1514.8	1510.3
152.5°	1542.2	1551.3	1558.9	1565.0	1558.9
155°	1589.4	1593.9	1598.5	1606.1	1601.5
157.5°	1630.4	1633.5	1636.5	1647.2	1639.6
160°	1666.9	1670.0	1671.5	1680.6	1674.5
162.5°	1700.4	1700.4	1701.9	1712.6	1705.0
165°	1729.3	1727.8	1727.8	1738.4	1730.8
167.5°	1755.1	1750.6	1750.6	1761.2	1753.6
170°	1774.9	1770.4	1768.8	1779.5	1770.4
172.5°	1788.6	1784.0	1782.5	1793.2	1784.0
175°	1799.3	1794.7	1791.6	1802.3	1793.2
177.5°	1805.3	1800.8	1797.7	1806.9	1797.7
180°	1802.3	1802.3	1802.3	1802.3	1802.3

(END OF REPORT)