

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: P1029328

Luminaire Tested: S122DIW-B290D1240UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029328
REPORT IS A COMBINATION OF REPORTS P985519 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-F_3500K
Description: Define 2 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

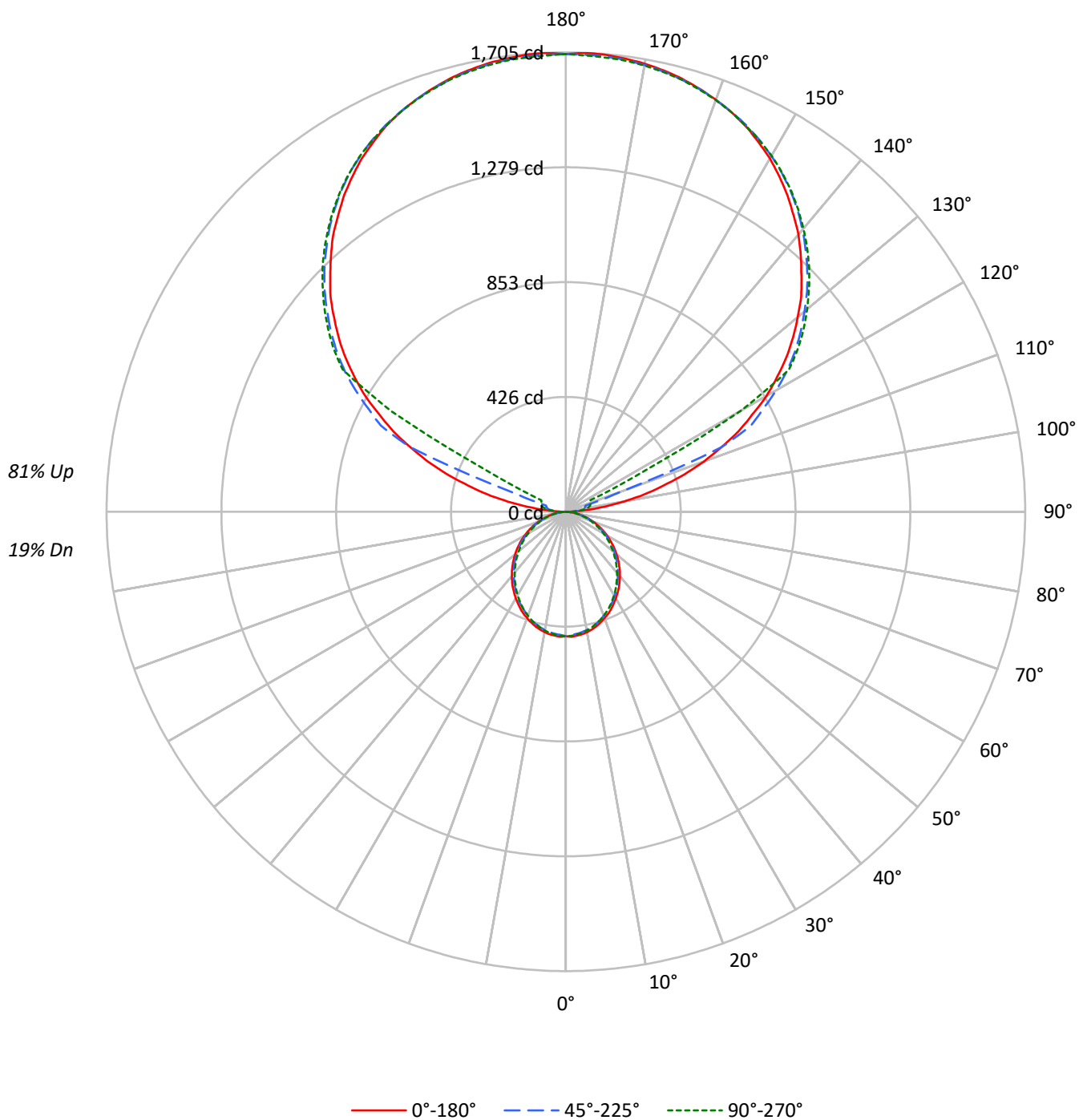
Lumens per Lamp: N/A
Luminaire Lumens: 6158.0 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	88	88	88	88	66	66	66	46	46	46	28	28	28	19		
1	91	87	83	80	80	77	74	71	58	56	54	40	39	38	24	24	23	16		
2	83	76	70	65	73	67	62	58	51	47	45	35	34	32	22	21	20	13		
3	75	66	60	54	66	59	53	48	45	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	16	14	10		
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	15	14	12	9		
6	58	46	39	33	51	41	35	30	32	27	24	22	19	17	14	12	11	7		
7	53	42	34	29	47	37	31	26	28	24	21	20	17	15	13	11	10	7		
8	49	38	30	25	43	34	27	23	26	21	18	18	15	13	12	10	9	6		
9	46	34	27	22	40	31	24	20	23	19	16	17	14	12	11	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°	7310	7310	7310
5°	7322	6969	6918
10°	7262	6651	6518
15°	7156	6331	6099
20°	7013	5983	5700
25°	6870	5619	5302
30°	6688	5277	4883
35°	6520	4917	4473
40°	6309	4562	4085
45°	6100	4210	3706
50°	5873	3850	3311
55°	5633	3467	2937
60°	5362	3050	2548
65°	5066	2628	2140
70°	4694	2167	1728
75°	4173	1670	1334
80°	3545	1136	860
85°	2571	528	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6100 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	0.7
10°-20°	122.3	2.0
20°-30°	179.7	2.9
30°-40°	208.7	3.4
40°-50°	208.5	3.4
50°-60°	181.8	3.0
60°-70°	134.4	2.2
70°-80°	76.0	1.2
80°-90°	23.1	0.4
90°-100°	56.0	0.9
100°-110°	208.8	3.4
110°-120°	553.8	9.0
120°-130°	918.5	14.9
130°-140°	975.7	15.8
140°-150°	906.8	14.7
150°-160°	729.0	11.8
160°-170°	469.8	7.6
170°-180°	161.7	2.6
0°-30°	345.5	5.6
0°-40°	554.2	9.0
0°-60°	944.5	15.3
0°-90°	1178.0	19.1
90°-120°	818.6	13.3
90°-150°	3619.6	58.8
90°-180°	4980.0	80.9
0°-180°	6158.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	462	460	455	459	458	44
15°	440	437	431	433	431	124
25°	398	394	387	388	387	183
35°	343	339	332	329	327	214
45°	279	276	270	265	263	216
55°	211	209	203	198	196	189
65°	142	140	135	131	129	141
75°	75	74	72	69	70	80
85°	18	18	17	16	16	20
90°	1	15	25	31	33	6
95°	80	39	48	54	53	95
105°	374	410	75	88	93	399
115°	707	728	758	189	101	696
125°	999	1015	1039	1047	1051	891
135°	1236	1256	1267	1280	1277	955
145°	1434	1433	1454	1463	1457	897
155°	1580	1568	1583	1590	1581	728
165°	1664	1657	1661	1669	1661	470
175°	1702	1694	1696	1705	1693	162
180°	1699	1699	1699	1699	1699	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.8	461.8	461.8	461.8	461.8
2.5°	464.5	462.3	457.4	461.8	461.0
5°	461.8	460.1	455.2	458.7	457.8
7.5°	458.7	456.1	451.2	454.7	453.8
10°	453.8	450.7	445.4	449.0	447.6
12.5°	447.2	444.5	439.2	441.4	440.5
15°	439.6	437.0	431.2	433.0	430.8
17.5°	430.3	427.6	421.9	424.1	421.9
20°	420.1	417.4	411.2	412.5	410.8
22.5°	409.9	405.9	400.1	400.1	399.2
25°	397.9	394.3	386.8	387.7	386.8
27.5°	384.6	381.5	375.7	374.4	372.1
30°	371.2	367.7	361.0	359.7	357.9
32.5°	357.0	354.4	347.3	344.6	342.8
35°	343.3	338.8	331.7	329.1	326.8
37.5°	327.7	323.7	316.6	313.5	311.3
40°	311.7	308.2	301.1	297.1	295.3
42.5°	296.2	292.6	285.5	281.1	278.4
45°	279.3	276.2	269.6	264.7	262.9
47.5°	262.9	259.8	252.7	247.8	245.1
50°	245.6	243.4	237.1	230.9	228.7
52.5°	228.7	225.6	219.8	214.9	211.8
55°	211.4	208.7	203.4	198.1	195.8
57.5°	194.1	191.8	186.1	180.7	179.0
60°	176.7	175.0	168.7	163.9	162.5
62.5°	159.9	156.8	152.3	147.9	146.1
65°	142.5	139.9	135.4	131.4	129.2
67.5°	124.8	122.6	118.6	115.5	113.7
70°	108.4	106.6	102.6	99.5	97.7
72.5°	91.5	89.7	87.5	84.4	83.0
75°	74.6	73.7	71.5	68.8	69.7
77.5°	59.5	57.7	56.8	55.5	54.2
80°	44.4	44.0	43.1	41.7	40.9
82.5°	30.2	30.2	29.8	28.0	28.0
85°	18.2	17.8	17.3	16.0	15.5
87.5°	8.0	7.1	6.2	4.9	4.4
90°	1.2	14.7	24.6	30.7	33.2
92.5°	30.7	25.8	29.5	32.0	33.2
95°	79.9	39.3	47.9	54.1	52.9
97.5°	143.8	43.0	62.7	66.4	67.6
100°	217.6	49.2	70.1	79.9	82.4
102.5°	298.7	296.2	72.5	86.0	89.7
105°	373.7	410.5	75.0	88.5	93.4
107.5°	460.9	491.7	77.4	91.0	95.9
110°	544.5	570.3	215.1	92.2	97.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	623.2	645.3	624.4	94.6	98.3
115°	706.8	727.7	758.4	189.3	100.8
117.5°	779.3	803.9	824.8	649.0	327.0
120°	860.4	878.9	901.0	915.7	749.8
122.5°	929.2	948.9	973.5	980.9	982.1
125°	999.3	1015.3	1038.6	1047.2	1050.9
127.5°	1063.2	1080.4	1098.9	1111.2	1112.4
130°	1123.5	1143.1	1156.6	1170.2	1168.9
132.5°	1184.9	1200.9	1214.4	1225.5	1224.2
135°	1236.5	1256.2	1267.3	1279.6	1277.1
137.5°	1290.6	1305.4	1317.7	1330.0	1326.3
140°	1343.5	1353.3	1366.8	1377.9	1371.7
142.5°	1387.7	1396.3	1412.3	1422.1	1416.0
145°	1434.4	1433.2	1454.1	1462.7	1456.6
147.5°	1475.0	1471.3	1492.2	1498.4	1493.4
150°	1514.3	1505.7	1525.4	1532.8	1526.6
152.5°	1547.5	1537.7	1556.1	1563.5	1554.9
155°	1579.5	1568.4	1583.2	1590.5	1580.7
157.5°	1605.3	1595.5	1606.5	1615.1	1605.3
160°	1627.4	1620.0	1627.4	1634.8	1626.2
162.5°	1647.1	1639.7	1645.9	1654.5	1643.4
165°	1664.3	1656.9	1660.6	1669.2	1660.6
167.5°	1677.8	1670.4	1674.1	1682.7	1671.7
170°	1688.9	1681.5	1684.0	1692.6	1681.5
172.5°	1696.2	1688.9	1691.3	1699.9	1688.9
175°	1702.4	1693.8	1696.2	1704.9	1692.6
177.5°	1704.9	1696.2	1697.5	1706.1	1695.0
180°	1698.7	1698.7	1698.7	1698.7	1698.7

(END OF REPORT)