

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: P1033352

Luminaire Tested: S124DIW-B1195D470UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033352
REPORT IS A COMBINATION OF REPORTS P997211 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

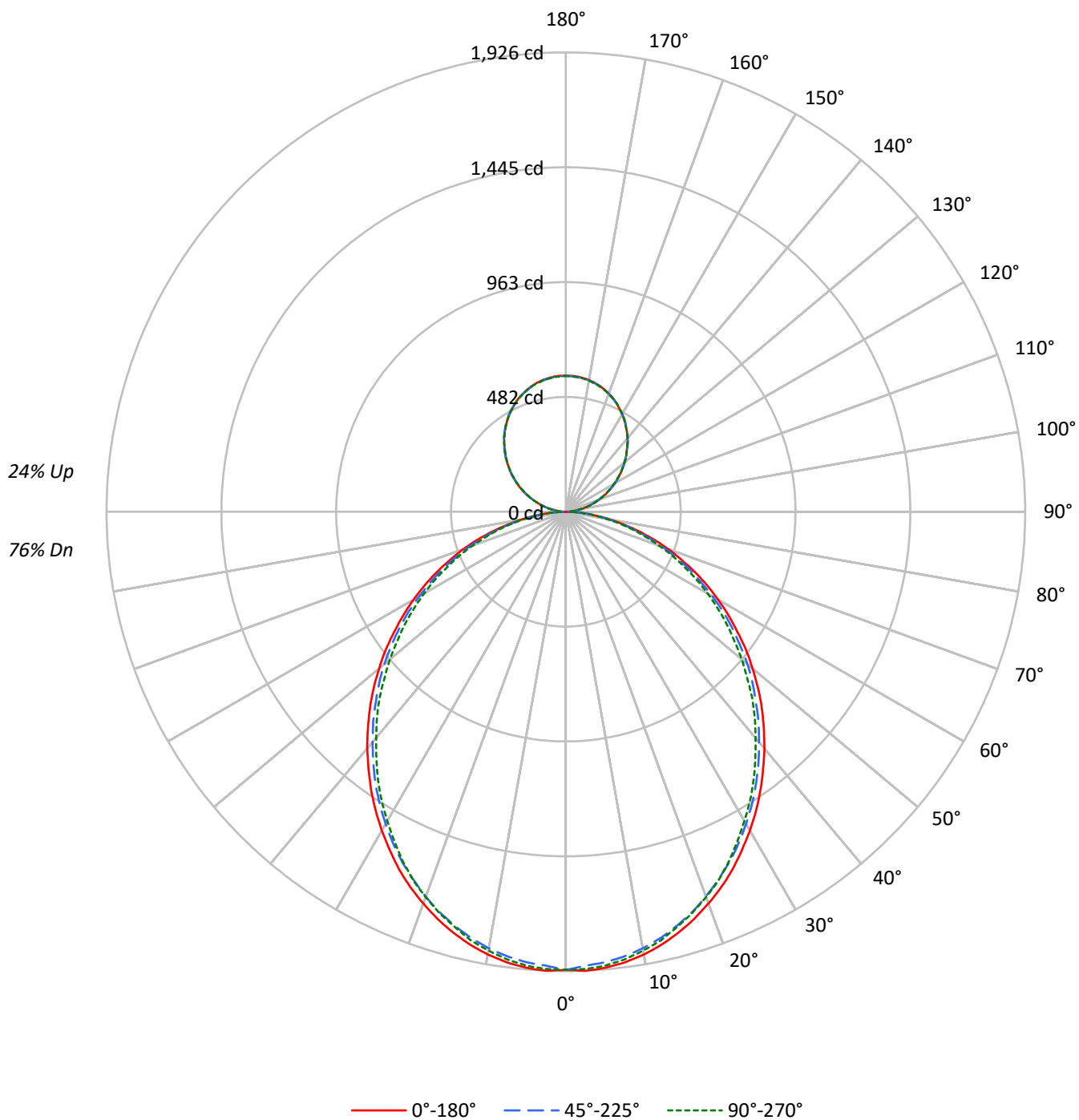
Lumens per Lamp: N/A
Luminaire Lumens: 6511.0 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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
RCR																	
0	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80
1	104	99	95	91	98	94	91	87	86	83	80	78	76	74	70	69	67
2	94	86	80	75	89	83	77	72	75	71	67	68	65	62	62	59	57
3	86	76	68	62	82	73	66	60	66	61	56	60	56	52	55	51	48
4	79	67	59	53	75	65	57	51	59	53	48	54	49	45	49	45	42
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36
6	67	54	46	40	63	52	44	39	48	41	36	44	38	34	40	36	32
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	37	32	29
8	58	45	37	31	55	43	36	30	40	33	29	37	31	27	34	29	26
9	54	41	33	28	51	40	32	27	37	30	26	34	28	24	31	27	23
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15660	15660	15660
5°	15672	15209	15228
10°	15540	14787	14684
15°	15317	14285	14069
20°	15032	13742	13434
25°	14712	13168	12749
30°	14326	12548	11998
35°	13926	11912	11272
40°	13508	11229	10500
45°	13071	10544	9778
50°	12586	9879	8978
55°	12060	9104	8184
60°	11522	8254	7356
65°	10906	7376	6424
70°	10196	6318	5425
75°	9135	5093	4345
80°	7786	3683	3057
85°	6047	2050	1645

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13071 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.8
10°-20°	509.9	7.8
20°-30°	750.5	11.5
30°-40°	872.4	13.4
40°-50°	872.3	13.4
50°-60°	763.0	11.7
60°-70°	566.4	8.7
70°-80°	321.4	4.9
80°-90°	93.3	1.4
90°-100°	37.1	0.6
100°-110°	111.2	1.7
110°-120°	189.0	2.9
120°-130°	249.2	3.8
130°-140°	279.9	4.3
140°-150°	275.1	4.2
150°-160°	231.4	3.6
160°-170°	153.9	2.4
170°-180°	53.9	0.8
0°-30°	1441.4	22.1
0°-40°	2313.8	35.5
0°-60°	3949.1	60.7
0°-90°	4930.2	75.7
90°-120°	337.3	5.2
90°-150°	1141.5	17.5
90°-180°	1581.0	24.3
0°-180°	6511.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1919	1913	1896	1913	1910	182
15°	1826	1820	1797	1806	1802	515
25°	1654	1643	1622	1623	1617	761
35°	1423	1413	1391	1380	1373	890
45°	1162	1151	1126	1109	1105	896
55°	879	874	852	834	825	787
65°	596	588	572	557	549	589
75°	317	309	302	295	294	336
85°	83	83	80	80	78	89
90°	1	6	10	12	13	7
95°	26	30	34	35	35	29
105°	103	103	105	106	108	109
115°	192	192	191	191	190	189
125°	280	280	279	278	278	249
135°	361	364	364	363	361	279
145°	438	440	441	440	439	274
155°	502	502	502	504	502	231
165°	547	546	545	547	546	154
175°	569	567	566	569	566	54
180°	570	570	570	570	570	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1920.4	1920.4	1920.4	1920.4	1920.4
2.5°	1926.5	1921.9	1905.0	1920.4	1918.8
5°	1918.8	1912.7	1895.7	1912.7	1909.6
7.5°	1905.0	1898.8	1880.4	1894.2	1892.7
10°	1885.0	1878.8	1858.8	1871.1	1868.1
12.5°	1858.8	1852.7	1831.1	1845.0	1840.4
15°	1826.5	1820.3	1797.3	1806.5	1801.9
17.5°	1789.6	1781.9	1760.3	1766.5	1763.4
20°	1748.0	1740.3	1717.3	1721.9	1718.8
22.5°	1703.4	1692.6	1669.6	1678.8	1672.6
25°	1654.2	1643.4	1621.8	1623.4	1617.2
27.5°	1598.8	1588.0	1568.0	1564.9	1557.2
30°	1543.4	1531.1	1511.1	1504.9	1497.2
32.5°	1484.9	1474.1	1452.6	1444.9	1437.2
35°	1423.4	1412.6	1391.0	1380.3	1372.6
37.5°	1358.7	1349.5	1326.4	1315.6	1304.9
40°	1295.6	1283.3	1260.2	1244.9	1237.2
42.5°	1227.9	1221.8	1195.6	1177.1	1172.5
45°	1161.8	1151.0	1126.4	1109.4	1104.8
47.5°	1092.5	1084.8	1061.7	1043.3	1031.0
50°	1021.7	1015.6	994.0	972.5	963.3
52.5°	952.5	944.8	921.7	903.3	890.9
55°	878.6	874.0	852.5	834.0	824.8
57.5°	809.4	804.8	783.2	764.8	755.5
60°	737.1	729.4	709.4	695.5	687.8
62.5°	666.3	660.1	638.6	626.3	618.6
65°	595.5	587.8	572.4	557.0	549.3
67.5°	523.2	517.0	501.6	486.2	484.7
70°	457.0	446.2	433.9	421.6	417.0
72.5°	386.2	375.5	366.2	357.0	352.4
75°	317.0	309.3	301.6	295.4	293.9
77.5°	249.3	246.2	238.5	237.0	232.4
80°	189.3	184.7	181.6	178.5	177.0
82.5°	130.8	129.3	129.3	127.7	126.2
85°	83.1	83.1	80.0	80.0	78.5
87.5°	40.0	38.5	36.9	36.9	36.9
90°	1.3	6.2	9.7	12.3	13.2
92.5°	11.5	17.2	19.4	20.7	21.1
95°	26.4	30.4	33.5	34.8	34.8
97.5°	42.3	45.8	49.3	51.1	51.1
100°	61.7	63.4	67.4	68.3	68.3
102.5°	82.0	82.4	85.9	87.2	87.7
105°	102.7	103.1	104.9	106.2	107.5
107.5°	124.3	124.7	125.1	126.9	126.5
110°	146.3	147.2	146.7	145.8	147.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.2	169.2	168.3	168.3	168.3
115°	192.1	192.1	191.2	190.8	190.3
117.5°	213.7	213.7	213.3	211.9	210.6
120°	235.3	237.1	235.7	233.5	234.4
122.5°	257.8	258.2	257.8	256.4	254.2
125°	279.8	279.8	279.4	278.5	277.6
127.5°	299.6	300.9	300.1	299.2	298.7
130°	320.8	322.1	322.1	321.2	319.5
132.5°	342.4	343.2	342.8	341.9	341.5
135°	360.9	363.5	363.5	362.6	361.3
137.5°	381.6	382.9	383.8	382.5	382.9
140°	402.3	403.2	403.2	402.7	402.3
142.5°	421.2	422.1	421.7	421.7	421.7
145°	438.4	440.2	440.6	440.2	438.9
147.5°	456.0	458.2	457.8	457.4	456.9
150°	471.9	473.7	473.7	473.7	473.2
152.5°	486.9	487.8	488.2	489.5	488.2
155°	502.3	502.3	501.9	503.6	501.9
157.5°	515.5	514.6	514.6	516.0	514.6
160°	527.0	526.5	526.1	527.4	525.2
162.5°	537.6	536.2	535.8	538.4	536.2
165°	546.8	545.5	544.6	547.3	545.5
167.5°	554.3	552.5	552.5	555.2	552.5
170°	560.5	558.3	558.7	561.4	558.3
172.5°	564.9	563.1	563.1	566.2	563.1
175°	568.8	566.6	566.2	569.3	566.2
177.5°	570.6	568.4	568.4	571.5	568.0
180°	569.7	569.7	569.7	569.7	569.7

(END OF REPORT)