

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: P1032579

Luminaire Tested: S124DIW-B1195D1560UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032579
REPORT IS A COMBINATION OF REPORTS P997104 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D1560UB2750-4F0-XX-W2A-F1_5000K
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

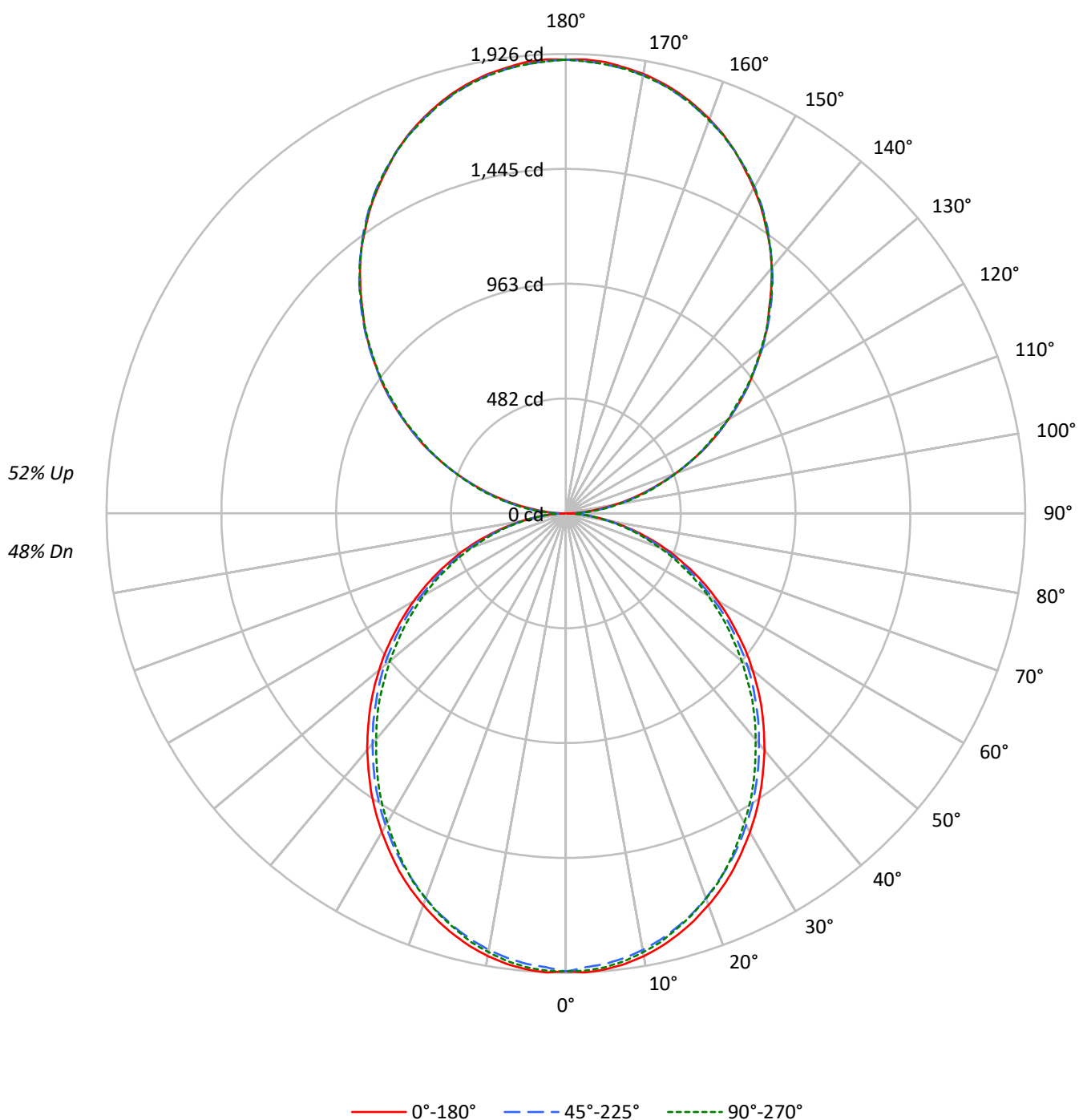
Lumens per Lamp: N/A
Luminaire Lumens: 10211.0 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 113.5
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

TEST NUMBER: P1032579

CATALOG NUMBER: S124DIW-B1195D1560UB2750-4F0-XX-W2A-F1_5000K

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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55
1	97	93	89	86	89	86	82	79	72	70	68	60	58	56	48	47	46
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	38	35	33
4	74	63	55	49	68	58	51	46	50	44	40	41	37	34	34	31	28
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25
6	63	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22
7	58	46	38	32	53	42	35	30	36	31	27	30	26	23	25	22	19
8	54	41	34	28	49	38	32	27	33	27	24	28	24	20	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14

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

TEST NUMBER: P1032579

CATALOG NUMBER: S124DIW-B1195D1560UB2750-4F0-XX-W2A-F1_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	1.8
10°-20°	509.9	5.0
20°-30°	750.5	7.3
30°-40°	872.4	8.5
40°-50°	872.3	8.5
50°-60°	763.0	7.5
60°-70°	566.4	5.5
70°-80°	321.4	3.1
80°-90°	96.1	0.9
90°-100°	124.0	1.2
100°-110°	371.4	3.6
110°-120°	630.9	6.2
120°-130°	832.1	8.1
130°-140°	934.5	9.2
140°-150°	918.5	9.0
150°-160°	772.5	7.6
160°-170°	514.0	5.0
170°-180°	180.0	1.8
0°-30°	1441.4	14.1
0°-40°	2313.8	22.7
0°-60°	3949.1	38.7
0°-90°	4933.1	48.3
90°-120°	1126.3	11.0
90°-150°	3811.4	37.3
90°-180°	5278.0	51.7
0°-180°	10211.0	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°	4	21	32	41	44	12
95°	88	102	112	116	116	96
105°	343	344	350	354	359	363
115°	641	641	638	637	636	633
125°	934	934	933	930	927	833
135°	1205	1214	1214	1211	1206	932
145°	1464	1470	1471	1470	1465	916
155°	1677	1677	1676	1682	1676	772
165°	1826	1821	1818	1827	1821	515
175°	1899	1892	1890	1901	1890	180
180°	1902	1902	1902	1902	1902	

TEST NUMBER: P1032579

CATALOG NUMBER: S124DIW-B1195D1560UB2750-4F0-XX-W2A-F1_5000K

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°	4.4	20.6	32.4	41.2	44.1
92.5°	38.3	57.4	64.7	69.1	70.6
95°	88.3	101.5	111.8	116.2	116.2
97.5°	141.2	153.0	164.8	170.7	170.7
100°	206.0	211.8	225.1	228.0	228.0
102.5°	273.6	275.1	286.9	291.3	292.8
105°	342.8	344.3	350.1	354.5	359.0
107.5°	414.9	416.3	417.8	423.7	422.2
110°	488.4	491.4	489.9	487.0	491.4



TEST NUMBER: P1032579

CATALOG NUMBER: S124DIW-B1195D1560UB2750-4F0-XX-W2A-F1_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	564.9	564.9	562.0	562.0	562.0
115°	641.4	641.4	638.5	637.0	635.5
117.5°	713.5	713.5	712.0	707.6	703.2
120°	785.6	791.5	787.1	779.7	782.7
122.5°	860.6	862.1	860.6	856.2	848.9
125°	934.2	934.2	932.7	929.8	926.8
127.5°	1000.4	1004.8	1001.9	998.9	997.4
130°	1071.0	1075.4	1075.4	1072.5	1066.6
132.5°	1143.1	1146.0	1144.6	1141.6	1140.1
135°	1204.9	1213.7	1213.7	1210.8	1206.4
137.5°	1274.0	1278.4	1281.4	1277.0	1278.4
140°	1343.2	1346.1	1346.1	1344.6	1343.2
142.5°	1406.4	1409.4	1407.9	1407.9	1407.9
145°	1463.8	1469.7	1471.2	1469.7	1465.3
147.5°	1522.7	1530.0	1528.5	1527.1	1525.6
150°	1575.6	1581.5	1581.5	1581.5	1580.0
152.5°	1625.6	1628.6	1630.0	1634.5	1630.0
155°	1677.1	1677.1	1675.7	1681.5	1675.7
157.5°	1721.3	1718.3	1718.3	1722.7	1718.3
160°	1759.5	1758.0	1756.6	1761.0	1753.6
162.5°	1794.8	1790.4	1788.9	1797.8	1790.4
165°	1825.7	1821.3	1818.4	1827.2	1821.3
167.5°	1850.7	1844.8	1844.8	1853.7	1844.8
170°	1871.3	1864.0	1865.4	1874.3	1864.0
172.5°	1886.0	1880.1	1880.1	1890.4	1880.1
175°	1899.3	1891.9	1890.4	1900.7	1890.4
177.5°	1905.2	1897.8	1897.8	1908.1	1896.3
180°	1902.2	1902.2	1902.2	1902.2	1902.2

(END OF REPORT)