

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: P1033382

Luminaire Tested: S124DIW-B1195D770UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033382
REPORT IS A COMBINATION OF REPORTS P997277 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB50-4F0-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

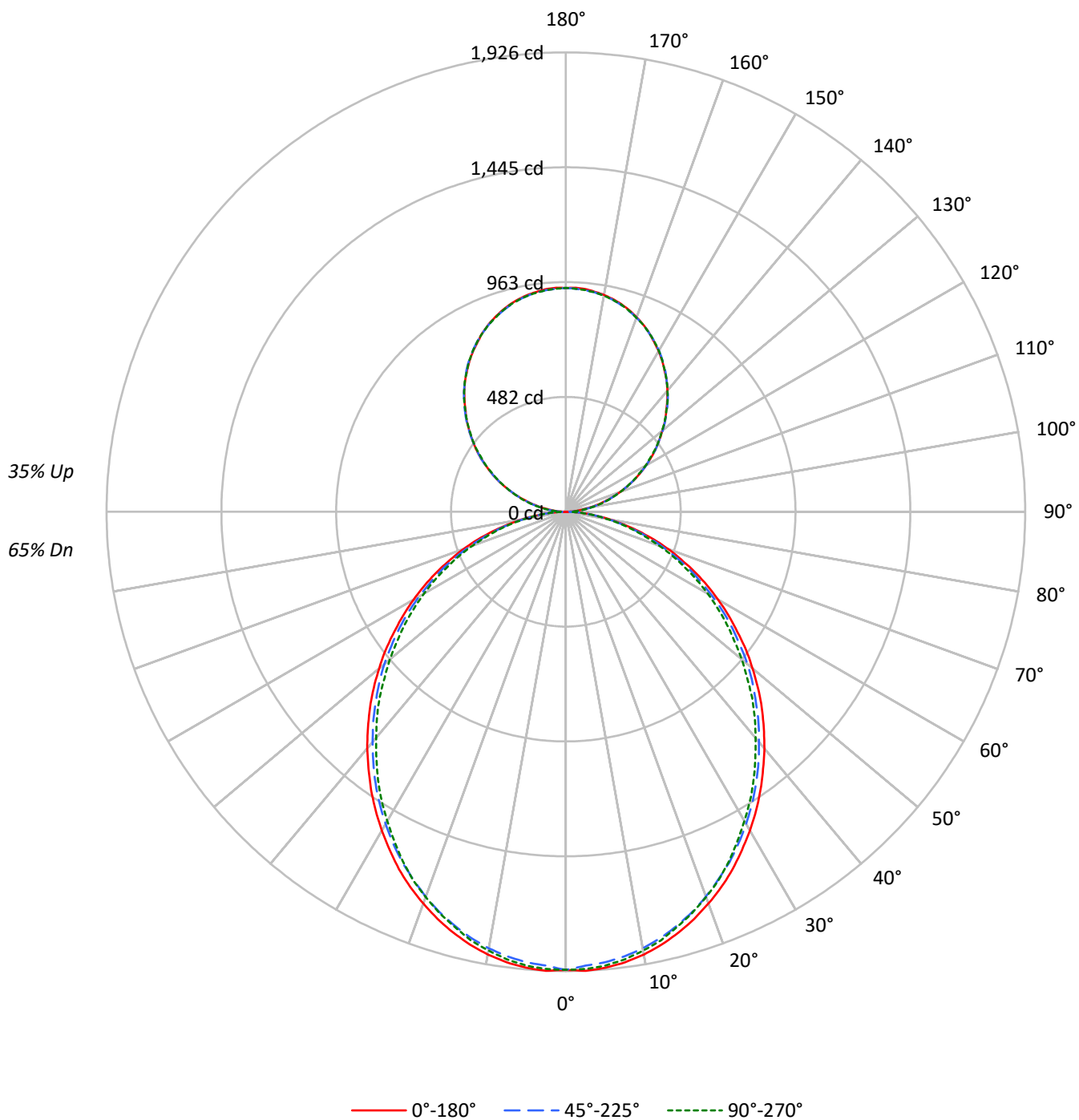
Lumens per Lamp: N/A
Luminaire Lumens: 7535.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84.5
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: P1033382

CATALOG NUMBER: S124DIW-B1195D770UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1033382

CATALOG NUMBER: S124DIW-B1195D770UB50-4F0-XX-W2A-F1

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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70
1	101	97	93	89	95	91	88	84	81	78	76	71	69	67	62	61	59
2	92	85	78	73	86	80	74	69	71	66	63	62	59	56	55	52	50
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	43
4	77	66	58	51	72	62	55	49	55	50	45	49	45	41	43	40	37
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	35	31	28
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25
8	56	43	36	30	53	41	34	29	37	31	27	33	28	25	30	26	22
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	23	20
10	49	37	29	24	46	35	28	23	32	26	22	28	24	20	26	21	19

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: P1033382

CATALOG NUMBER: S124DIW-B1195D770UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.4
10°-20°	509.9	6.8
20°-30°	750.5	10.0
30°-40°	872.4	11.6
40°-50°	872.3	11.6
50°-60°	763.0	10.1
60°-70°	566.4	7.5
70°-80°	321.4	4.3
80°-90°	94.1	1.2
90°-100°	61.2	0.8
100°-110°	183.2	2.4
110°-120°	311.3	4.1
120°-130°	410.5	5.4
130°-140°	461.1	6.1
140°-150°	453.2	6.0
150°-160°	381.1	5.1
160°-170°	253.6	3.4
170°-180°	88.8	1.2
0°-30°	1441.4	19.1
0°-40°	2313.8	30.7
0°-60°	3949.1	52.4
0°-90°	4931.0	65.4
90°-120°	555.7	7.4
90°-150°	1880.4	25.0
90°-180°	2604.0	34.6
0°-180°	7535.0	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°	2	10	16	20	22	9
95°	44	50	55	57	57	47
105°	169	170	173	175	177	179
115°	316	316	315	314	314	312
125°	461	461	460	459	457	411
135°	594	599	599	597	595	460
145°	722	725	726	725	723	452
155°	827	827	827	830	827	381
165°	901	899	897	902	899	254
175°	937	933	933	938	933	89
180°	938	938	938	938	938	

TEST NUMBER: P1033382

CATALOG NUMBER: S124DIW-B1195D770UB50-4F0-XX-W2A-F1

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°	2.2	10.2	16.0	20.3	21.8
92.5°	18.9	28.3	31.9	34.1	34.8
95°	43.5	50.1	55.2	57.3	57.3
97.5°	69.7	75.5	81.3	84.2	84.2
100°	101.6	104.5	111.1	112.5	112.5
102.5°	135.0	135.7	141.5	143.7	144.4
105°	169.1	169.8	172.7	174.9	177.1
107.5°	204.7	205.4	206.1	209.0	208.3
110°	241.0	242.4	241.7	240.3	242.4

TEST NUMBER: P1033382

CATALOG NUMBER: S124DIW-B1195D770UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	278.7	278.7	277.3	277.3	277.3
115°	316.5	316.5	315.0	314.3	313.6
117.5°	352.0	352.0	351.3	349.1	346.9
120°	387.6	390.5	388.3	384.7	386.1
122.5°	424.6	425.3	424.6	422.4	418.8
125°	460.9	460.9	460.2	458.7	457.3
127.5°	493.6	495.7	494.3	492.8	492.1
130°	528.4	530.6	530.6	529.1	526.2
132.5°	564.0	565.4	564.7	563.2	562.5
135°	594.5	598.8	598.8	597.4	595.2
137.5°	628.6	630.7	632.2	630.0	630.7
140°	662.7	664.1	664.1	663.4	662.7
142.5°	693.9	695.3	694.6	694.6	694.6
145°	722.2	725.1	725.8	725.1	722.9
147.5°	751.2	754.9	754.1	753.4	752.7
150°	777.4	780.3	780.3	780.3	779.5
152.5°	802.0	803.5	804.2	806.4	804.2
155°	827.4	827.4	826.7	829.6	826.7
157.5°	849.2	847.8	847.8	849.9	847.8
160°	868.1	867.4	866.6	868.8	865.2
162.5°	885.5	883.3	882.6	887.0	883.3
165°	900.8	898.6	897.1	901.5	898.6
167.5°	913.1	910.2	910.2	914.5	910.2
170°	923.3	919.6	920.4	924.7	919.6
172.5°	930.5	927.6	927.6	932.7	927.6
175°	937.0	933.4	932.7	937.8	932.7
177.5°	940.0	936.3	936.3	941.4	935.6
180°	938.5	938.5	938.5	938.5	938.5

(END OF REPORT)