

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: P1033358

Luminaire Tested: S124DIW-B1195D770UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033358
REPORT IS A COMBINATION OF REPORTS P997220 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

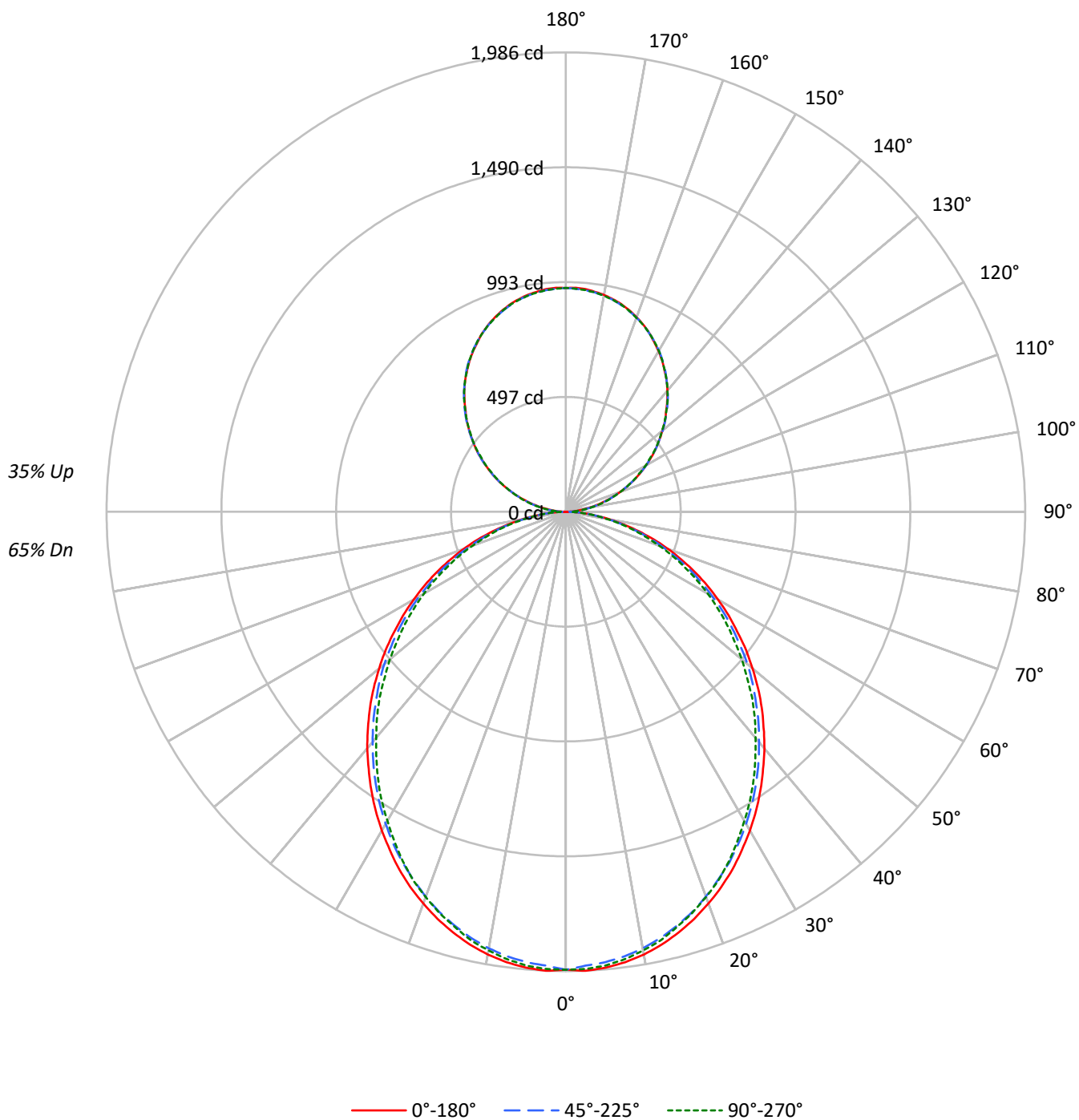
Lumens per Lamp: N/A
Luminaire Lumens: 7769.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1033358

CATALOG NUMBER: S124DIW-B1195D770UB27-4F0-XX-W2A-F1

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	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°	16146	16146	16146
5°	16159	15681	15700
10°	16022	15246	15139
15°	15792	14729	14506
20°	15499	14169	13850
25°	15168	13577	13145
30°	14770	12938	12371
35°	14357	12282	11622
40°	13928	11578	10826
45°	13476	10871	10081
50°	12977	10186	9257
55°	12435	9386	8438
60°	11879	8510	7585
65°	11244	7605	6624
70°	10512	6515	5593
75°	9418	5252	4480
80°	8024	3797	3151
85°	6236	2114	1696

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13476 cd/sqm

TEST NUMBER: P1033358

CATALOG NUMBER: S124DIW-B1195D770UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.6	2.4
10°-20°	525.8	6.8
20°-30°	773.8	10.0
30°-40°	899.5	11.6
40°-50°	899.4	11.6
50°-60°	786.6	10.1
60°-70°	584.0	7.5
70°-80°	331.4	4.3
80°-90°	97.0	1.2
90°-100°	63.1	0.8
100°-110°	188.9	2.4
110°-120°	321.0	4.1
120°-130°	423.3	5.4
130°-140°	475.4	6.1
140°-150°	467.3	6.0
150°-160°	393.0	5.1
160°-170°	261.5	3.4
170°-180°	91.6	1.2
0°-30°	1486.2	19.1
0°-40°	2385.7	30.7
0°-60°	4071.7	52.4
0°-90°	5084.1	65.4
90°-120°	572.9	7.4
90°-150°	1938.9	25.0
90°-180°	2685.0	34.6
0°-180°	7769.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1980	1980	1980	1980	1980	
5°	1978	1972	1955	1972	1969	188
15°	1883	1877	1853	1863	1858	531
25°	1706	1694	1672	1674	1667	785
35°	1468	1456	1434	1423	1415	918
45°	1198	1187	1161	1144	1139	923
55°	906	901	879	860	850	811
65°	614	606	590	574	566	608
75°	327	319	311	305	303	347
85°	86	86	82	82	81	92
90°	2	10	16	21	22	9
95°	45	52	57	59	59	49
105°	174	175	178	180	183	185
115°	326	326	325	324	323	322
125°	475	475	474	473	472	424
135°	613	617	617	616	614	474
145°	745	748	748	748	745	466
155°	853	853	852	855	852	393
165°	929	926	925	930	926	262
175°	966	962	962	967	962	92
180°	968	968	968	968	968	

TEST NUMBER: P1033358

CATALOG NUMBER: S124DIW-B1195D770UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1980.0	1980.0	1980.0	1980.0	1980.0
2.5°	1986.3	1981.6	1964.1	1980.0	1978.4
5°	1978.4	1972.0	1954.6	1972.0	1968.9
7.5°	1964.1	1957.8	1938.7	1953.0	1951.4
10°	1943.5	1937.1	1916.5	1929.2	1926.0
12.5°	1916.5	1910.2	1888.0	1902.2	1897.5
15°	1883.2	1876.9	1853.1	1862.6	1857.8
17.5°	1845.1	1837.2	1815.0	1821.3	1818.2
20°	1802.3	1794.4	1770.6	1775.3	1772.1
22.5°	1756.3	1745.2	1721.4	1730.9	1724.5
25°	1705.5	1694.4	1672.2	1673.8	1667.4
27.5°	1648.4	1637.3	1616.7	1613.5	1605.6
30°	1591.3	1578.6	1558.0	1551.6	1543.7
32.5°	1531.0	1519.9	1497.7	1489.7	1481.8
35°	1467.5	1456.4	1434.2	1423.1	1415.2
37.5°	1400.9	1391.4	1367.6	1356.5	1345.4
40°	1335.9	1323.2	1299.4	1283.5	1275.6
42.5°	1266.0	1259.7	1232.7	1213.7	1208.9
45°	1197.8	1186.7	1161.3	1143.9	1139.1
47.5°	1126.4	1118.5	1094.7	1075.7	1063.0
50°	1053.4	1047.1	1024.9	1002.7	993.2
52.5°	982.1	974.1	950.3	931.3	918.6
55°	905.9	901.1	878.9	859.9	850.4
57.5°	834.5	829.8	807.5	788.5	779.0
60°	759.9	752.0	731.4	717.1	709.2
62.5°	687.0	680.6	658.4	645.7	637.8
65°	614.0	606.1	590.2	574.3	566.4
67.5°	539.4	533.1	517.2	501.3	499.8
70°	471.2	460.1	447.4	434.7	429.9
72.5°	398.2	387.1	377.6	368.1	363.3
75°	326.8	318.9	311.0	304.6	303.0
77.5°	257.0	253.8	245.9	244.3	239.6
80°	195.1	190.4	187.2	184.0	182.4
82.5°	134.9	133.3	133.3	131.7	130.1
85°	85.7	85.7	82.5	82.5	80.9
87.5°	41.2	39.7	38.1	38.1	38.1
90°	2.2	10.5	16.5	21.0	22.5
92.5°	19.5	29.2	32.9	35.2	35.9
95°	44.9	51.6	56.9	59.1	59.1
97.5°	71.8	77.8	83.8	86.8	86.8
100°	104.8	107.8	114.5	116.0	116.0
102.5°	139.2	139.9	145.9	148.2	148.9
105°	174.4	175.1	178.1	180.4	182.6
107.5°	211.0	211.8	212.5	215.5	214.8
110°	248.5	250.0	249.2	247.7	250.0

TEST NUMBER: P1033358

CATALOG NUMBER: S124DIW-B1195D770UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	287.4	287.4	285.9	285.9	285.9
115°	326.3	326.3	324.8	324.1	323.3
117.5°	363.0	363.0	362.2	360.0	357.7
120°	399.6	402.6	400.4	396.6	398.1
122.5°	437.8	438.6	437.8	435.6	431.8
125°	475.2	475.2	474.5	473.0	471.5
127.5°	508.9	511.2	509.7	508.2	507.4
130°	544.8	547.1	547.1	545.6	542.6
132.5°	581.5	583.0	582.2	580.8	580.0
135°	612.9	617.4	617.4	615.9	613.7
137.5°	648.1	650.4	651.8	649.6	650.4
140°	683.3	684.8	684.8	684.0	683.3
142.5°	715.5	717.0	716.2	716.2	716.2
145°	744.7	747.6	748.4	747.6	745.4
147.5°	774.6	778.3	777.6	776.8	776.1
150°	801.5	804.5	804.5	804.5	803.8
152.5°	827.0	828.5	829.2	831.5	829.2
155°	853.2	853.2	852.4	855.4	852.4
157.5°	875.6	874.1	874.1	876.4	874.1
160°	895.1	894.3	893.6	895.8	892.1
162.5°	913.0	910.8	910.0	914.5	910.8
165°	928.8	926.5	925.0	929.5	926.5
167.5°	941.5	938.5	938.5	943.0	938.5
170°	952.0	948.2	949.0	953.5	948.2
172.5°	959.4	956.4	956.4	961.7	956.4
175°	966.2	962.4	961.7	966.9	961.7
177.5°	969.2	965.4	965.4	970.7	964.7
180°	967.7	967.7	967.7	967.7	967.7

(END OF REPORT)