

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: P1029202

Luminaire Tested: S122DIW-B1005D1440UB2750-4F0-XX-W2A-D_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029202
REPORT IS A COMBINATION OF REPORTS P985145 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B1005D1440UB2750-4F0-XX-W2A-D_4000K
Description: Define 2 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

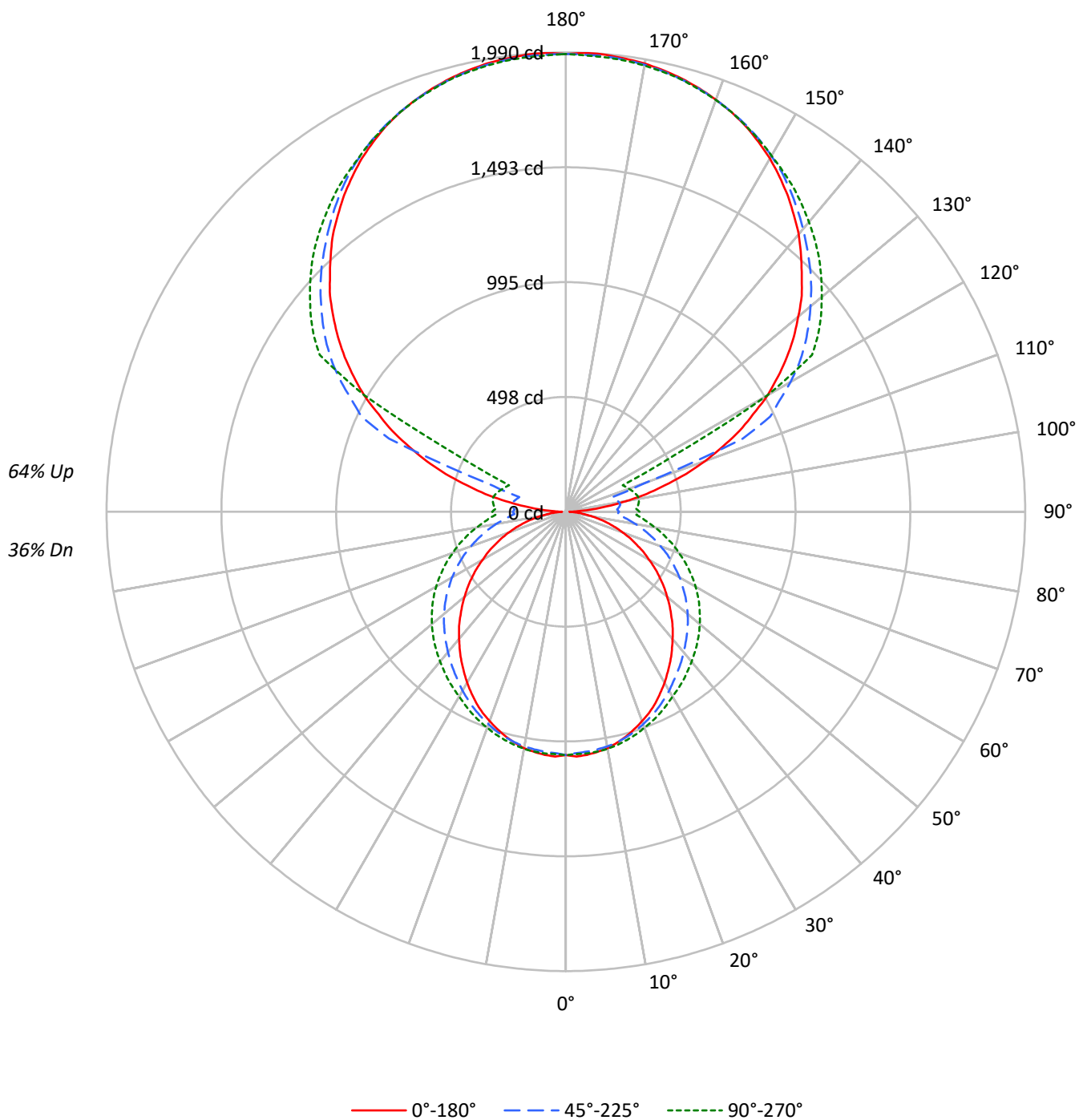
Lumens per Lamp: N/A
Luminaire Lumens: 9838.0 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1029202

CATALOG NUMBER: S122DIW-B1005D1440UB2750-4F0-XX-W2A-D_4000K

Luminous Intensity Polar Plot



TEST NUMBER: P1029202

CATALOG NUMBER: S122DIW-B1005D1440UB2750-4F0-XX-W2A-D_4000K

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
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76		59	59	59		44
1	94	89	85	81	84	80	77	74	65	62	60		50	48	47		37
2	85	77	71	65	76	70	64	59	56	52	49		43	41	38		32
3	77	67	60	54	69	61	54	49	49	44	40		38	35	32		28
4	70	59	51	45	63	54	47	41	43	38	34		34	30	27		25
5	64	53	44	38	58	48	40	35	39	33	29		30	26	23		22
6	59	47	39	33	53	43	35	30	35	29	25		27	23	20		20
7	55	42	34	29	49	38	31	26	31	26	22		24	20	18		18
8	50	38	30	25	45	35	28	23	28	23	19		22	18	15		17
9	47	35	27	22	42	32	25	20	26	21	17		20	17	14		15
10	44	32	24	20	39	29	23	18	24	19	15		19	15	12		14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16681	16681	16681
5°	16757	15969	15880
10°	16645	15416	15191
15°	16409	14845	14486
20°	16112	14243	13816
25°	15821	13668	13209
30°	15411	13083	12607
35°	14996	12520	12166
40°	14558	12033	11726
45°	14144	11591	11345
50°	13695	11183	10966
55°	13227	10751	10583
60°	12651	10300	10179
65°	12055	9782	9714
70°	11377	9225	9213
75°	10511	8668	8741
80°	9141	8090	8252
85°	7769	7544	7828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14144 cd/sqm

TEST NUMBER: P1029202

CATALOG NUMBER: S122DIW-B1005D1440UB2750-4F0-XX-W2A-D_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.0
10°-20°	286.5	2.9
20°-30°	434.1	4.4
30°-40°	528.7	5.4
40°-50°	568.8	5.8
50°-60°	552.4	5.6
60°-70°	482.4	4.9
70°-80°	371.3	3.8
80°-90°	252.2	2.6
90°-100°	237.0	2.4
100°-110°	369.0	3.8
110°-120°	729.2	7.4
120°-130°	1118.3	11.4
130°-140°	1158.3	11.8
140°-150°	1061.8	10.8
150°-160°	851.0	8.7
160°-170°	548.4	5.6
170°-180°	188.7	1.9
0°-30°	820.6	8.3
0°-40°	1349.2	13.7
0°-60°	2470.4	25.1
0°-90°	3576.2	36.4
90°-120°	1335.2	13.6
90°-150°	4673.6	47.5
90°-180°	6262.0	63.7
0°-180°	9838.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1057	1052	1043	1052	1051	100
15°	1008	1011	1011	1025	1023	284
25°	916	927	941	959	964	421
35°	790	816	845	878	889	494
45°	648	689	742	790	805	500
55°	496	551	631	686	706	444
65°	339	414	504	567	586	337
75°	188	273	371	437	457	199
85°	55	150	247	312	333	58
90°	17	121	230	299	320	16
95°	106	130	232	297	314	120
105°	444	531	219	288	311	475
115°	831	872	977	358	272	818
125°	1170	1188	1264	1316	1334	1044
135°	1445	1468	1496	1543	1552	1117
145°	1674	1673	1698	1717	1717	1048
155°	1844	1831	1848	1857	1845	850
165°	1943	1934	1938	1949	1938	549
175°	1987	1977	1980	1990	1976	189
180°	1983	1983	1983	1983	1983	

TEST NUMBER: P1029202

CATALOG NUMBER: S122DIW-B1005D1440UB2750-4F0-XX-W2A-D_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1053.8	1053.8	1053.8	1053.8	1053.8
2.5°	1061.5	1056.9	1046.2	1053.8	1050.8
5°	1056.9	1052.3	1043.1	1052.3	1050.8
7.5°	1049.2	1046.2	1038.5	1049.2	1047.7
10°	1040.1	1037.0	1032.4	1044.7	1043.1
12.5°	1024.8	1026.3	1023.3	1035.5	1034.0
15°	1008.0	1011.1	1011.1	1024.8	1023.3
17.5°	986.6	992.7	997.3	1011.1	1011.1
20°	965.2	972.9	979.0	995.8	995.8
22.5°	942.3	951.5	960.7	977.5	980.5
25°	916.4	927.1	940.8	959.1	963.7
27.5°	885.8	902.6	917.9	940.8	943.9
30°	855.3	875.1	895.0	919.4	924.0
32.5°	821.7	844.6	869.0	898.0	907.2
35°	789.6	815.6	844.6	878.2	888.9
37.5°	754.5	783.5	820.1	856.8	867.5
40°	719.3	752.9	794.2	833.9	847.6
42.5°	685.7	719.3	768.2	812.5	826.3
45°	647.6	688.8	742.3	789.6	804.9
47.5°	610.9	655.2	716.3	765.2	782.0
50°	572.7	620.1	688.8	740.7	757.5
52.5°	536.1	586.5	659.8	713.2	731.6
55°	496.4	551.3	630.8	685.7	705.6
57.5°	458.2	519.3	598.7	658.3	678.1
60°	416.9	482.6	569.7	627.7	649.1
62.5°	380.3	449.0	536.1	598.7	618.5
65°	339.1	413.9	504.0	566.6	586.5
67.5°	302.4	380.3	471.9	534.5	555.9
70°	262.7	342.1	436.8	502.5	520.8
72.5°	226.0	308.5	404.7	468.9	491.8
75°	187.9	273.4	371.1	436.8	456.7
77.5°	151.2	239.8	339.1	404.7	426.1
80°	114.5	207.7	307.0	371.1	392.5
82.5°	84.0	175.6	276.4	340.6	360.4
85°	55.0	149.7	247.4	311.6	332.9
87.5°	33.6	125.2	223.0	285.6	305.5
90°	16.7	121.1	230.3	298.6	319.7
92.5°	49.6	124.8	222.3	284.7	304.4
95°	105.5	129.9	231.6	296.8	313.7
97.5°	178.6	126.6	238.1	299.0	318.7
100°	264.7	124.6	234.5	302.5	322.1
102.5°	357.9	405.4	226.7	297.4	318.5
105°	443.8	531.2	218.8	288.1	310.7
107.5°	545.7	618.3	211.1	278.8	301.3
110°	641.8	702.5	362.6	268.0	290.6

TEST NUMBER: P1029202

CATALOG NUMBER: S122DIW-B1005D1440UB2750-4F0-XX-W2A-D_4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	733.6	783.8	829.7	260.2	281.3
115°	831.2	872.4	976.9	358.5	272.0
117.5°	914.3	955.2	1043.7	884.4	523.7
120°	1009.0	1036.6	1123.6	1183.5	1006.6
122.5°	1089.4	1113.8	1199.0	1248.9	1264.1
125°	1169.7	1188.3	1264.4	1315.7	1333.7
127.5°	1244.3	1262.8	1325.6	1378.0	1393.3
130°	1314.6	1335.9	1383.8	1436.3	1447.1
132.5°	1386.3	1403.4	1442.1	1490.2	1500.9
135°	1445.0	1468.0	1496.2	1542.6	1551.9
137.5°	1508.1	1525.4	1547.4	1590.8	1597.1
140°	1569.8	1579.8	1598.7	1636.0	1638.0
142.5°	1621.5	1630.0	1648.7	1678.5	1679.0
145°	1674.5	1673.1	1697.5	1716.7	1717.1
147.5°	1721.9	1717.6	1742.0	1750.6	1749.5
150°	1767.8	1757.7	1780.7	1789.3	1782.1
152.5°	1806.5	1795.0	1816.6	1825.2	1815.1
155°	1843.8	1830.9	1848.1	1856.7	1845.3
157.5°	1874.0	1862.5	1875.4	1885.4	1874.0
160°	1899.8	1891.2	1899.8	1908.4	1898.4
162.5°	1922.8	1914.1	1921.3	1931.4	1918.4
165°	1942.8	1934.2	1938.5	1948.6	1938.5
167.5°	1958.6	1950.0	1954.3	1964.4	1951.4
170°	1971.5	1962.9	1965.8	1975.8	1962.9
172.5°	1980.1	1971.5	1974.4	1984.5	1971.5
175°	1987.3	1977.3	1980.1	1990.2	1975.8
177.5°	1990.2	1980.1	1981.6	1991.6	1978.7
180°	1983.0	1983.0	1983.0	1983.0	1983.0

(END OF REPORT)