

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: P1031232

Luminaire Tested: S123RDIW-B775D1320UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031232
REPORT IS A COMBINATION OF REPORTS P994660 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B775D1320UB2750-4F0-XX-W2A-F_3500K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

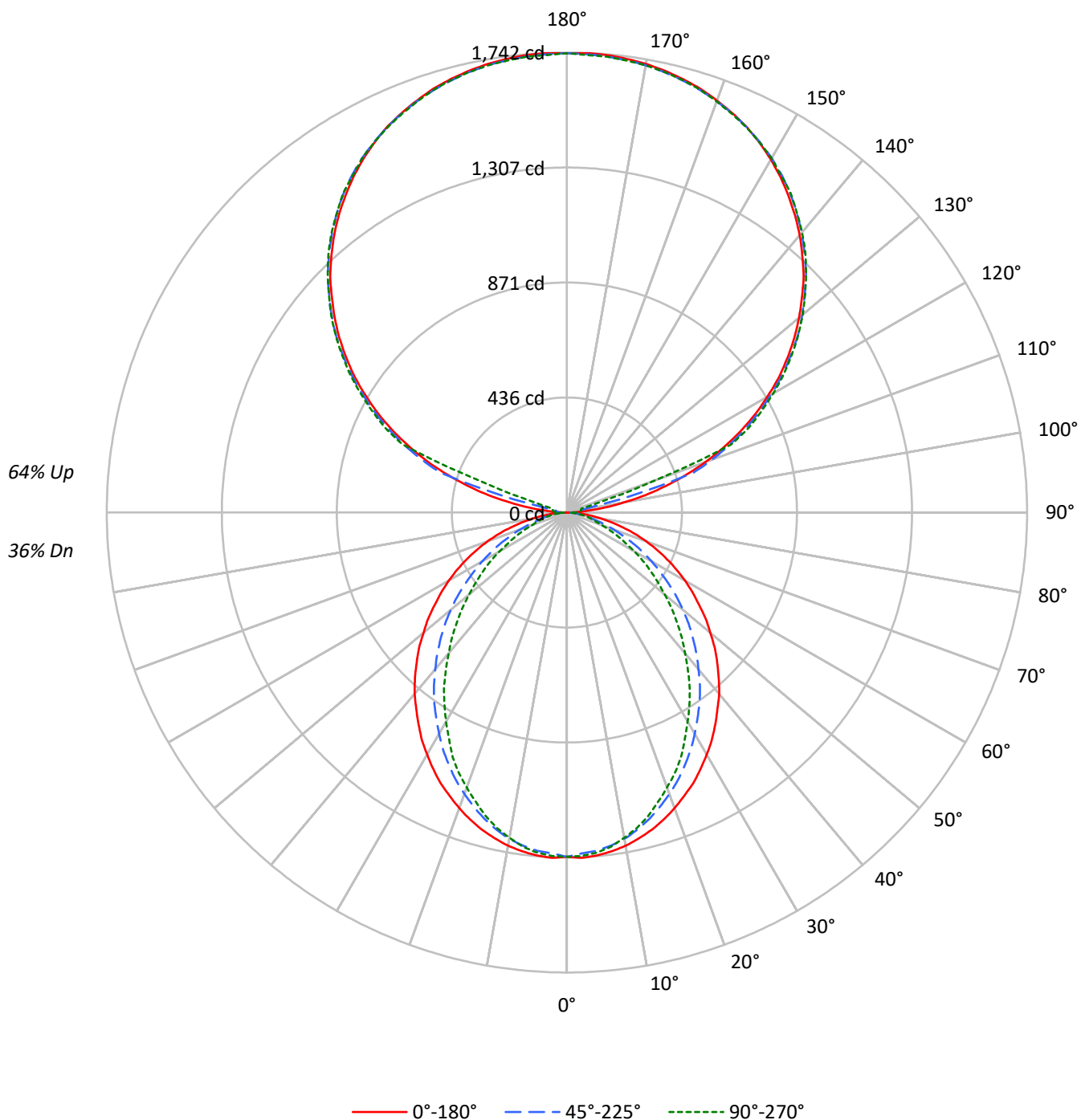
Lumens per Lamp: N/A
Luminaire Lumens: 8250.0 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 78
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: P1031232

CATALOG NUMBER: S123RDIW-B775D1320UB2750-4F0-XX-W2A-F_3500K

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	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43			36
1	95	91	87	84	86	82	79	76	66	64	62	52	50	49	38	38	37			31
2	87	79	74	69	78	72	67	63	58	55	52	46	43	41	34	33	31			26
3	79	70	63	57	71	64	58	53	52	47	44	41	38	35	30	28	27			22
4	72	62	54	49	65	56	50	45	46	41	37	36	33	30	27	25	23			19
5	66	55	47	42	60	50	44	39	41	36	32	33	29	26	25	22	20			17
6	61	50	42	36	55	45	38	33	37	32	28	29	26	23	22	20	18			15
7	57	45	37	32	51	41	34	29	34	29	25	27	23	20	20	18	16			13
8	52	40	33	28	47	37	31	26	31	26	22	25	21	18	19	16	14			12
9	49	37	30	25	44	34	27	23	28	23	20	23	19	16	17	15	13			11
10	45	34	27	22	41	31	25	21	26	21	18	21	17	15	16	14	12			10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14032	14032	14032
5°	14055	13535	13499
10°	13944	13026	12769
15°	13763	12397	11971
20°	13525	11713	11079
25°	13280	11002	10233
30°	12967	10246	9234
35°	12643	9503	8324
40°	12338	8697	7319
45°	11949	7908	6414
50°	11518	7065	5479
55°	11073	6164	4621
60°	10645	5239	3752
65°	10095	4290	2928
70°	9403	3244	2093
75°	8407	2197	1658
80°	7177	1527	1163
85°	5379	824	610

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11949 cd/sqm

TEST NUMBER: P1031232

CATALOG NUMBER: S123RDIW-B775D1320UB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.5	1.5
10°-20°	340.9	4.1
20°-30°	490.8	5.9
30°-40°	552.8	6.7
40°-50°	528.7	6.4
50°-60°	432.8	5.2
60°-70°	291.8	3.5
70°-80°	146.4	1.8
80°-90°	41.7	0.5
90°-100°	61.3	0.7
100°-110°	296.5	3.6
110°-120°	726.6	8.8
120°-130°	922.4	11.2
130°-140°	985.3	11.9
140°-150°	921.4	11.2
150°-160°	743.2	9.0
160°-170°	479.6	5.8
170°-180°	165.3	2.0
0°-30°	954.3	11.6
0°-40°	1507.0	18.3
0°-60°	2468.6	29.9
0°-90°	2948.5	35.7
90°-120°	1084.4	13.1
90°-150°	3913.5	47.4
90°-180°	5302.0	64.3
0°-180°	8250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1304	1304	1304	1304	1304	
5°	1304	1298	1286	1295	1293	124
15°	1243	1232	1202	1197	1189	350
25°	1131	1105	1056	1034	1022	520
35°	979	941	875	830	811	613
45°	805	757	676	615	590	621
55°	611	559	469	408	387	548
65°	418	360	277	225	214	413
75°	221	170	112	102	99	235
85°	56	33	30	28	28	61
90°	1	14	31	36	39	8
95°	79	26	40	49	49	94
105°	385	399	283	54	57	408
115°	722	730	742	754	760	713
125°	1018	1028	1034	1036	1039	910
135°	1267	1275	1280	1284	1280	976
145°	1462	1472	1474	1477	1477	916
155°	1611	1608	1610	1616	1608	742
165°	1699	1695	1694	1704	1695	480
175°	1739	1733	1734	1743	1733	166
180°	1739	1739	1739	1739	1739	

TEST NUMBER: P1031232

CATALOG NUMBER: S123RDIW-B775D1320UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1303.6	1303.6	1303.6	1303.6	1303.6
2.5°	1308.9	1304.6	1291.9	1303.6	1301.5
5°	1303.6	1298.3	1285.6	1295.1	1293.0
7.5°	1294.1	1288.8	1272.9	1279.3	1276.1
10°	1281.4	1274.0	1254.9	1256.0	1250.7
12.5°	1263.4	1254.9	1230.6	1229.6	1223.2
15°	1243.3	1231.7	1202.1	1196.8	1189.4
17.5°	1219.0	1206.3	1169.3	1158.7	1148.2
20°	1191.5	1174.6	1134.4	1120.7	1108.0
22.5°	1160.8	1140.8	1097.4	1079.4	1067.8
25°	1131.2	1104.8	1056.2	1034.0	1022.3
27.5°	1095.3	1066.8	1013.9	984.3	966.3
30°	1058.3	1026.6	967.4	931.4	914.5
32.5°	1021.3	984.3	920.9	880.7	862.7
35°	979.0	940.9	875.4	829.9	810.9
37.5°	936.7	895.5	826.8	776.0	752.8
40°	896.5	850.0	775.0	720.0	695.7
42.5°	851.1	804.6	726.3	665.0	643.9
45°	804.6	757.0	675.6	615.3	589.9
47.5°	759.1	706.2	625.9	560.3	538.1
50°	708.3	658.7	573.0	507.5	483.2
52.5°	662.9	607.9	523.3	454.6	433.5
55°	611.1	559.3	469.4	408.1	386.9
57.5°	564.6	508.5	417.6	359.5	341.5
60°	515.9	457.8	370.0	312.9	295.0
62.5°	467.3	409.2	321.4	268.5	249.5
65°	417.6	359.5	277.0	225.2	213.6
67.5°	367.9	308.7	228.4	189.2	176.6
70°	319.3	262.2	188.2	151.2	139.6
72.5°	270.7	214.6	149.1	120.5	117.4
75°	221.0	170.2	112.1	101.5	99.4
77.5°	175.5	129.0	87.8	81.4	79.3
80°	132.2	88.8	66.6	63.4	61.3
82.5°	90.9	55.0	47.6	44.4	44.4
85°	56.0	32.8	29.6	27.5	27.5
87.5°	25.4	13.7	13.7	12.7	11.6
90°	1.3	14.2	31.0	36.2	38.8
92.5°	29.7	22.0	33.6	42.6	43.9
95°	78.8	25.8	40.1	49.1	49.1
97.5°	143.4	107.2	41.3	51.7	53.0
100°	218.3	244.2	42.6	53.0	54.3
102.5°	303.6	320.4	95.6	53.0	55.6
105°	385.0	399.2	282.9	54.3	56.8
107.5°	471.6	483.2	502.6	303.6	134.4
110°	558.1	568.5	582.7	540.0	355.3

TEST NUMBER: P1031232

CATALOG NUMBER: S123RDIW-B775D1320UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.8	649.9	664.1	675.7	673.1
115°	722.2	730.0	741.6	754.5	759.7
117.5°	802.3	811.4	817.8	828.2	829.5
120°	876.0	887.6	891.5	901.8	901.8
122.5°	950.9	959.9	965.1	971.6	972.9
125°	1018.1	1028.4	1033.6	1036.2	1038.8
127.5°	1085.3	1095.6	1102.1	1105.9	1103.4
130°	1147.3	1157.6	1162.8	1168.0	1165.4
132.5°	1206.7	1217.1	1220.9	1226.1	1222.2
135°	1267.4	1275.2	1280.4	1284.2	1280.4
137.5°	1319.1	1329.5	1332.0	1338.5	1335.9
140°	1370.8	1378.5	1382.4	1387.6	1385.0
142.5°	1418.6	1426.4	1430.2	1434.1	1430.2
145°	1462.5	1471.6	1474.2	1476.7	1476.7
147.5°	1505.2	1511.6	1514.2	1516.8	1510.3
150°	1543.9	1547.8	1550.4	1553.0	1549.1
152.5°	1578.8	1580.1	1581.4	1586.6	1580.1
155°	1611.1	1608.5	1609.8	1616.3	1608.5
157.5°	1636.9	1636.9	1635.7	1643.4	1633.1
160°	1660.2	1658.9	1657.6	1665.4	1656.3
162.5°	1682.2	1678.3	1677.0	1686.0	1678.3
165°	1699.0	1695.1	1693.8	1704.1	1695.1
167.5°	1713.2	1708.0	1708.0	1718.3	1708.0
170°	1724.8	1719.6	1719.6	1730.0	1719.6
172.5°	1732.6	1726.1	1727.4	1737.7	1726.1
175°	1739.0	1732.6	1733.8	1742.9	1732.6
177.5°	1741.6	1735.1	1736.4	1746.8	1733.8
180°	1739.0	1739.0	1739.0	1739.0	1739.0

(END OF REPORT)