

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: P1030662

Luminaire Tested: S123DIW-B1000D1320UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030662
REPORT IS A COMBINATION OF REPORTS P990605 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB2750-4F0-XX-W2A-D_3500K
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

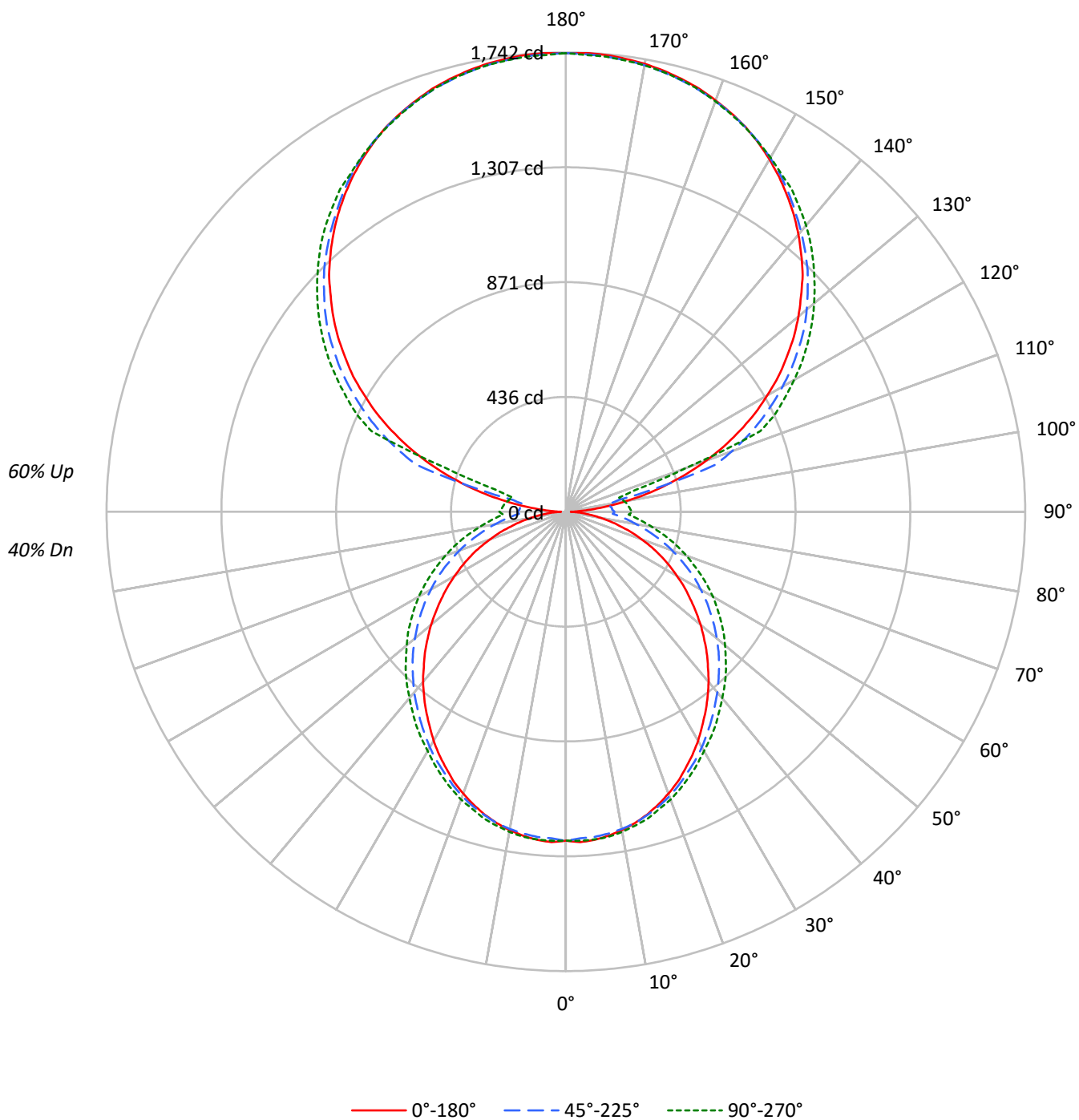
Lumens per Lamp: N/A
Luminaire Lumens: 9497.0 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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: P1030662

CATALOG NUMBER: S123DIW-B1000D1320UB2750-4F0-XX-W2A-D_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1030662

CATALOG NUMBER: S123DIW-B1000D1320UB2750-4F0-XX-W2A-D_3500K

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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47			40
1	95	90	86	82	86	82	79	75	67	65	62	53	51	50	40	39	38			32
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	32			26
3	78	68	61	55	71	62	56	51	51	46	42	41	37	34	31	29	27			22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23			19
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	25	22	20			16
6	60	48	40	34	54	44	37	31	36	31	27	29	25	22	22	19	17			14
7	55	43	35	30	50	40	32	27	33	27	23	26	22	19	20	17	15			12
8	51	39	31	26	47	36	29	24	30	24	21	24	20	17	19	16	13			11
9	48	36	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12			10
10	45	33	25	21	41	30	23	19	25	20	16	20	16	14	16	13	11			9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13426	13426	13426
5°	13463	13032	13021
10°	13337	12679	12583
15°	13160	12289	12116
20°	12910	11855	11616
25°	12602	11366	11098
30°	12287	10923	10578
35°	11931	10459	10154
40°	11594	10033	9706
45°	11220	9621	9337
50°	10848	9214	8937
55°	10439	8796	8568
60°	10037	8369	8190
65°	9624	7913	7749
70°	9003	7402	7293
75°	8217	6818	6823
80°	7302	6228	6287
85°	6397	5750	5902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11220 cd/sqm

TEST NUMBER: P1030662

CATALOG NUMBER: S123DIW-B1000D1320UB2750-4F0-XX-W2A-D_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	1.2
10°-20°	337.3	3.6
20°-30°	504.4	5.3
30°-40°	602.3	6.3
40°-50°	630.1	6.6
50°-60°	591.3	6.2
60°-70°	493.9	5.2
70°-80°	353.2	3.7
80°-90°	213.6	2.2
90°-100°	193.4	2.0
100°-110°	393.6	4.1
110°-120°	791.4	8.3
120°-130°	959.3	10.1
130°-140°	1001.9	10.5
140°-150°	924.9	9.7
150°-160°	743.2	7.8
160°-170°	479.6	5.1
170°-180°	165.3	1.7
0°-30°	960.1	10.1
0°-40°	1562.3	16.5
0°-60°	2783.8	29.3
0°-90°	3844.5	40.5
90°-120°	1378.3	14.5
90°-150°	4264.4	44.9
90°-180°	5653.0	59.5
0°-180°	9497.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1249	1246	1238	1249	1247	118
15°	1189	1193	1192	1205	1204	335
25°	1073	1087	1091	1109	1109	495
35°	924	946	963	984	989	578
45°	756	788	822	848	859	583
55°	576	621	670	706	717	516
65°	398	451	511	552	565	394
75°	216	280	348	393	409	231
85°	67	134	206	253	266	69
90°	19	98	184	236	252	17
95°	94	94	175	226	239	106
105°	396	443	385	194	209	419
115°	729	753	814	859	875	720
125°	1022	1032	1077	1108	1120	914
135°	1270	1277	1297	1325	1328	978
145°	1464	1472	1474	1488	1493	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: P1030662

CATALOG NUMBER: S123DIW-B1000D1320UB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.3	1247.3	1247.3	1247.3	1247.3
2.5°	1254.1	1250.0	1239.2	1250.0	1248.7
5°	1248.7	1246.0	1237.8	1248.7	1247.3
7.5°	1239.2	1239.2	1231.0	1244.6	1243.3
10°	1225.6	1228.3	1221.5	1235.1	1232.4
12.5°	1209.3	1213.4	1209.3	1221.5	1218.8
15°	1188.9	1193.0	1191.6	1205.2	1203.8
17.5°	1164.4	1172.6	1171.2	1183.5	1180.7
20°	1137.3	1145.4	1148.1	1160.4	1161.7
22.5°	1108.7	1116.9	1121.0	1137.3	1135.9
25°	1073.4	1087.0	1091.1	1108.7	1108.7
27.5°	1039.4	1054.4	1062.5	1077.5	1078.8
30°	1002.8	1020.4	1031.3	1047.6	1047.6
32.5°	962.0	982.4	997.3	1015.0	1019.1
35°	923.9	945.7	963.4	983.7	989.2
37.5°	883.2	907.6	928.0	951.1	955.2
40°	842.4	866.9	894.1	917.2	922.6
42.5°	797.6	828.8	857.4	883.2	891.3
45°	755.5	788.1	822.0	847.9	858.7
47.5°	710.6	747.3	785.4	813.9	822.0
50°	667.1	705.2	747.3	778.6	788.1
52.5°	620.9	661.7	709.3	741.9	754.1
55°	576.1	620.9	669.9	706.5	717.4
57.5°	532.6	578.8	631.8	668.5	680.7
60°	486.4	535.3	591.1	629.1	644.0
62.5°	443.0	493.2	553.0	591.1	604.6
65°	398.1	451.1	510.9	551.7	565.2
67.5°	353.3	409.0	468.8	513.6	524.5
70°	305.7	364.1	429.4	472.8	486.4
72.5°	262.2	320.7	388.6	433.4	447.0
75°	216.0	279.9	347.8	392.7	409.0
77.5°	176.6	240.5	308.4	356.0	368.2
80°	134.5	201.1	271.7	317.9	331.5
82.5°	97.8	165.8	237.8	284.0	297.6
85°	66.6	134.5	206.5	252.7	266.3
87.5°	40.8	108.7	178.0	224.2	237.8
90°	19.0	98.4	184.5	235.9	252.1
92.5°	46.0	96.7	176.3	230.1	243.6
95°	93.7	93.7	174.6	225.7	239.3
97.5°	157.0	169.7	167.7	218.8	233.7
100°	230.5	299.9	160.8	210.6	225.5
102.5°	314.5	369.3	205.7	201.1	217.3
105°	395.9	442.7	384.8	194.3	209.0
107.5°	481.1	521.2	596.4	434.0	277.1
110°	566.3	601.1	669.7	662.3	488.5

TEST NUMBER: P1030662

CATALOG NUMBER: S123DIW-B1000D1320UB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	649.0	677.1	742.9	788.5	798.1
115°	729.0	753.1	813.6	859.1	875.2
117.5°	809.1	829.1	881.7	924.7	936.8
120°	881.4	899.8	948.6	990.1	999.6
122.5°	956.3	968.1	1015.4	1051.8	1062.6
125°	1022.2	1032.5	1077.1	1108.2	1120.3
127.5°	1089.4	1098.3	1138.8	1169.8	1176.8
130°	1151.4	1160.3	1192.7	1223.7	1229.3
132.5°	1209.4	1219.8	1244.0	1273.7	1279.3
135°	1270.1	1276.6	1296.7	1325.0	1328.0
137.5°	1321.8	1330.9	1342.9	1371.1	1375.3
140°	1372.2	1379.9	1387.8	1413.4	1417.6
142.5°	1420.0	1426.4	1430.2	1451.8	1454.7
145°	1463.9	1471.6	1474.2	1487.6	1493.0
147.5°	1505.2	1511.6	1514.2	1520.9	1519.8
150°	1543.9	1547.8	1550.4	1553.0	1551.8
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)