

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: P1031302

Luminaire Tested: S123DIW-B1000D1320UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031302
REPORT IS A COMBINATION OF REPORTS P990622 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB30-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

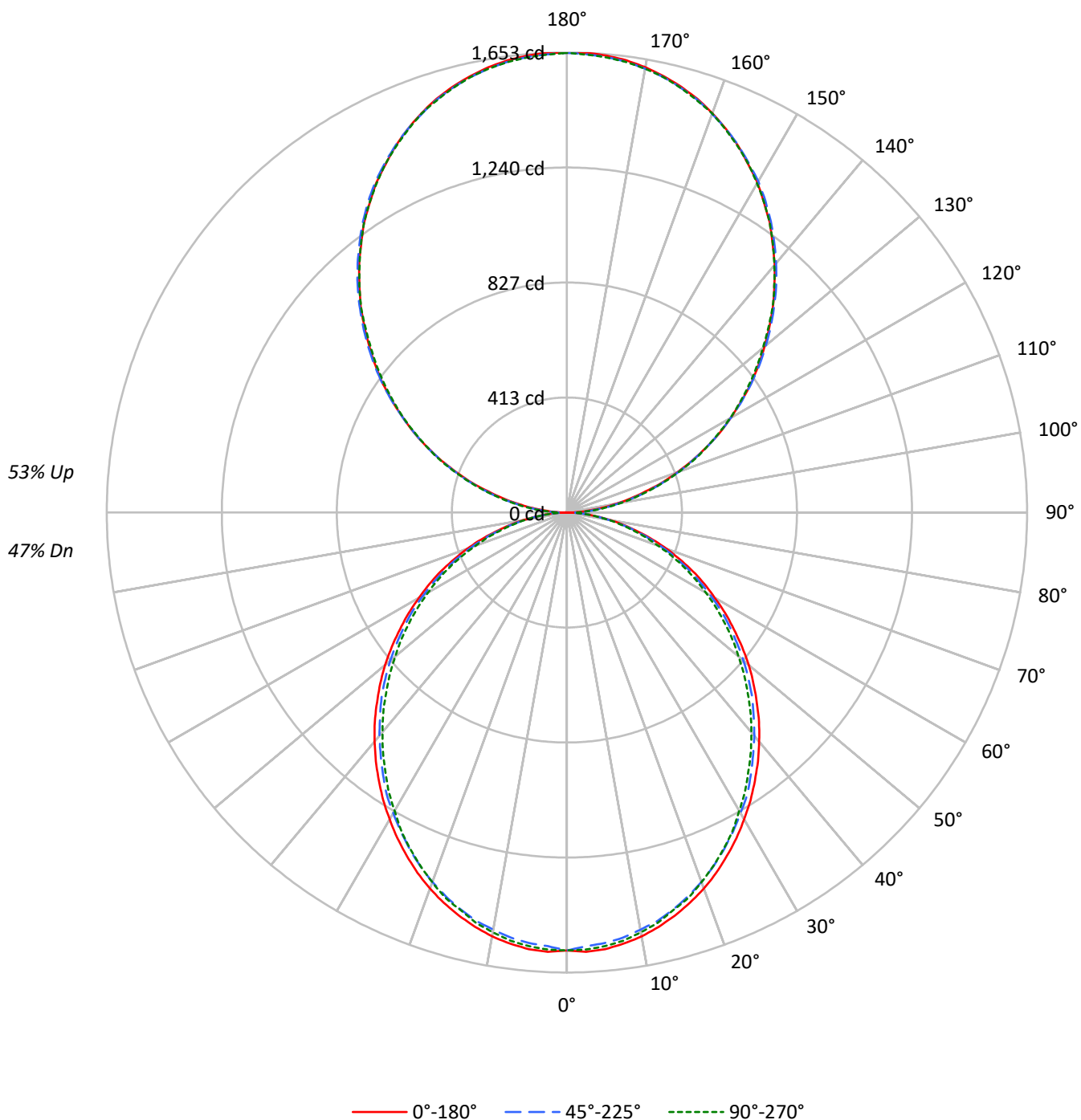
Lumens per Lamp: N/A
Luminaire Lumens: 8674.9 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1031302

CATALOG NUMBER: S123DIW-B1000D1320UB30-4F0-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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54
1	97	93	89	85	89	85	82	79	72	69	67	59	57	56	47	46	45
2	88	81	75	70	81	75	69	65	63	59	55	52	49	46	42	40	38
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	34	32
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	30	27	24
6	62	50	42	36	57	47	39	34	40	34	30	33	29	25	27	24	21
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	21	19
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	22	19	17
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15
10	46	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16937	16937	16937
5°	16979	16352	16328
10°	16828	15798	15636
15°	16593	15222	14883
20°	16326	14585	14137
25°	15978	13910	13339
30°	15598	13212	12499
35°	15200	12498	11666
40°	14784	11751	10845
45°	14325	11021	9988
50°	13859	10209	9129
55°	13262	9362	8257
60°	12647	8428	7329
65°	12067	7417	6363
70°	11235	6297	5234
75°	10035	4987	4062
80°	8665	3505	2873
85°	6762	1882	1438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14325 cd/sqm

TEST NUMBER: P1031302

CATALOG NUMBER: S123DIW-B1000D1320UB30-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.3	1.7
10°-20°	418.8	4.8
20°-30°	618.6	7.1
30°-40°	722.5	8.3
40°-50°	726.3	8.4
50°-60°	638.0	7.4
60°-70°	475.2	5.5
70°-80°	270.4	3.1
80°-90°	80.4	0.9
90°-100°	106.3	1.2
100°-110°	321.8	3.7
110°-120°	547.8	6.3
120°-130°	720.7	8.3
130°-140°	810.1	9.3
140°-150°	796.4	9.2
150°-160°	670.5	7.7
160°-170°	446.4	5.1
170°-180°	156.3	1.8
0°-30°	1185.8	13.7
0°-40°	1908.2	22.0
0°-60°	3272.5	37.7
0°-90°	4098.4	47.2
90°-120°	976.0	11.3
90°-150°	3303.2	38.1
90°-180°	4576.0	52.7
0°-180°	8674.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1574	1574	1574	1574	1574	
5°	1575	1568	1553	1567	1564	149
15°	1499	1494	1476	1487	1479	423
25°	1361	1353	1335	1337	1333	627
35°	1177	1169	1151	1143	1136	736
45°	965	959	942	925	919	745
55°	732	731	713	698	691	656
65°	499	492	479	468	464	493
75°	264	258	254	248	244	282
85°	70	68	68	65	65	75
90°	1	14	31	36	39	11
95°	77	86	96	101	101	84
105°	292	294	306	306	309	313
115°	551	555	553	554	553	546
125°	807	811	808	803	798	720
135°	1047	1055	1054	1048	1046	807
145°	1270	1273	1277	1275	1270	793
155°	1454	1454	1456	1461	1452	670
165°	1584	1580	1580	1588	1579	447
175°	1648	1643	1643	1650	1641	157
180°	1652	1652	1652	1652	1652	

TEST NUMBER: P1031302

CATALOG NUMBER: S123DIW-B1000D1320UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1573.5	1573.5	1573.5	1573.5	1573.5
2.5°	1580.2	1574.8	1559.9	1573.5	1572.1
5°	1574.8	1568.0	1553.2	1566.7	1564.0
7.5°	1562.6	1555.9	1541.0	1553.2	1551.8
10°	1546.4	1539.6	1522.0	1534.2	1531.5
12.5°	1524.7	1519.3	1503.1	1511.2	1509.9
15°	1499.0	1493.6	1476.0	1486.9	1478.7
17.5°	1470.6	1463.9	1446.3	1454.4	1451.7
20°	1438.2	1430.0	1412.5	1417.9	1413.8
22.5°	1401.6	1393.5	1375.9	1380.0	1374.6
25°	1361.0	1352.9	1335.3	1336.7	1332.6
27.5°	1319.1	1311.0	1292.0	1293.4	1289.3
30°	1273.1	1266.3	1247.4	1247.4	1237.9
32.5°	1227.1	1217.6	1204.1	1194.6	1190.6
35°	1177.0	1168.9	1151.3	1143.2	1136.5
37.5°	1127.0	1116.2	1098.6	1089.1	1085.0
40°	1074.2	1066.1	1047.2	1036.3	1030.9
42.5°	1021.5	1012.0	993.0	982.2	976.8
45°	964.6	959.2	941.6	925.4	918.6
47.5°	909.2	901.0	884.8	868.6	863.2
50°	852.3	845.6	828.0	813.1	805.0
52.5°	792.8	788.8	769.8	757.6	749.5
55°	731.9	730.6	713.0	698.1	691.3
57.5°	675.1	669.7	656.2	642.6	634.5
60°	612.9	611.5	595.3	583.1	576.3
62.5°	557.4	553.3	537.1	524.9	520.9
65°	499.2	492.5	478.9	468.1	464.1
67.5°	437.0	431.6	420.8	411.3	405.9
70°	381.5	373.4	365.3	355.8	349.1
72.5°	323.3	317.9	308.5	300.3	297.6
75°	263.8	258.4	254.4	247.6	243.5
77.5°	211.1	208.4	202.9	197.5	197.5
80°	159.6	155.6	152.9	151.5	151.5
82.5°	109.6	109.6	109.6	106.9	105.5
85°	70.4	67.6	67.6	64.9	64.9
87.5°	35.2	31.1	29.8	28.4	28.4
90°	1.3	14.3	31.1	36.3	38.9
92.5°	38.9	46.7	54.5	58.4	55.8
95°	76.6	85.6	96.0	101.2	101.2
97.5°	125.9	132.3	140.1	146.6	145.3
100°	176.5	184.2	190.7	194.6	197.2
102.5°	234.8	238.7	247.8	251.7	250.4
105°	291.9	294.5	306.2	306.2	308.8
107.5°	359.4	360.7	365.9	369.8	368.5
110°	421.7	424.3	426.9	432.1	429.5

TEST NUMBER: P1031302

CATALOG NUMBER: S123DIW-B1000D1320UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	486.6	487.8	487.8	494.3	494.3
115°	551.4	555.3	552.7	554.0	552.7
117.5°	617.6	618.9	616.3	616.3	612.4
120°	678.6	686.4	679.9	678.6	676.0
122.5°	742.2	747.3	744.7	740.9	737.0
125°	807.0	810.9	808.3	803.1	797.9
127.5°	866.7	874.5	871.9	864.1	858.9
130°	926.4	936.8	932.9	927.7	918.6
132.5°	986.1	996.5	993.9	987.4	980.9
135°	1047.1	1054.8	1053.5	1048.4	1045.8
137.5°	1102.9	1109.3	1113.2	1106.7	1102.9
140°	1161.2	1167.7	1169.0	1167.7	1158.6
142.5°	1214.4	1220.9	1223.5	1222.2	1215.7
145°	1270.2	1272.8	1276.7	1275.4	1270.2
147.5°	1318.2	1323.4	1327.3	1327.3	1319.5
150°	1368.8	1371.4	1374.0	1374.0	1366.2
152.5°	1410.4	1414.2	1415.5	1418.1	1411.6
155°	1454.5	1454.5	1455.8	1461.0	1451.9
157.5°	1492.1	1490.8	1492.1	1497.3	1489.5
160°	1527.1	1524.5	1524.5	1531.0	1525.8
162.5°	1558.3	1554.4	1555.7	1562.2	1553.1
165°	1584.2	1580.3	1580.3	1588.1	1579.0
167.5°	1606.3	1601.1	1602.4	1610.2	1602.4
170°	1624.4	1619.2	1619.2	1628.3	1619.2
172.5°	1638.7	1633.5	1633.5	1641.3	1632.2
175°	1647.8	1642.6	1642.6	1650.4	1641.3
177.5°	1653.0	1647.8	1647.8	1655.6	1646.5
180°	1651.7	1651.7	1651.7	1651.7	1651.7

(END OF REPORT)