

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: P1031307

Luminaire Tested: S123DIW-B1000D1320UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031307
REPORT IS A COMBINATION OF REPORTS P990630 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB35-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

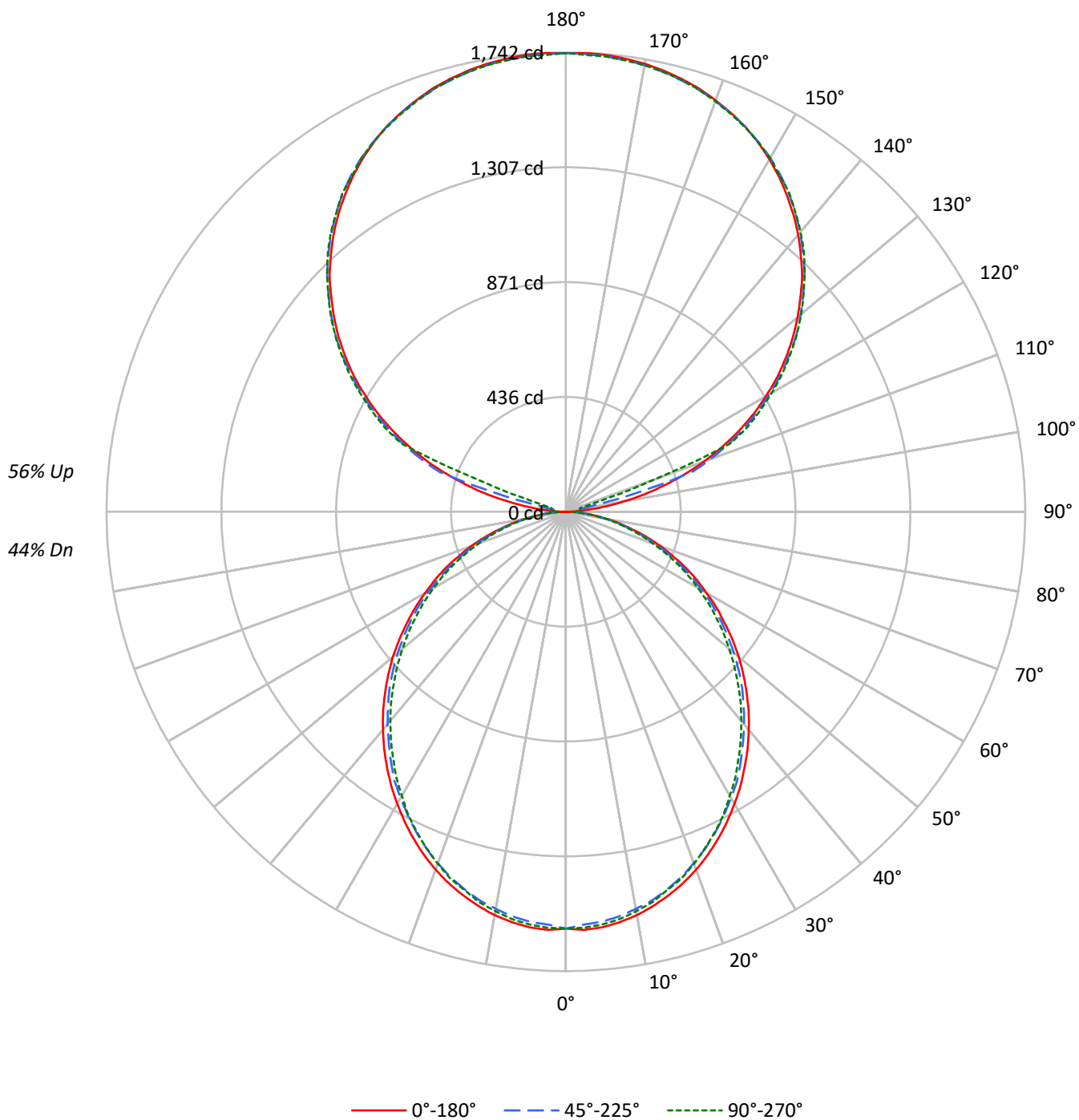
Lumens per Lamp: N/A
Luminaire Lumens: 9418.0 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1031307

CATALOG NUMBER: S123DIW-B1000D1320UB35-4F0-XX-W2A-F

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	97	97	97	97	80	80	80	64	64	64	50	50	50
1	96	92	88	85	88	84	81	78	70	68	65	57	55	54	44	43	42
2	88	80	74	69	80	74	68	64	61	57	54	50	47	45	39	37	36
3	80	71	63	57	73	65	58	53	54	49	45	44	41	38	35	32	30
4	73	62	55	49	67	57	50	45	48	43	39	39	35	32	31	28	26
5	67	56	47	42	61	51	44	39	43	37	33	35	31	28	28	25	23
6	62	50	42	36	56	46	39	34	39	33	29	32	28	24	25	22	20
7	57	45	37	31	52	41	34	29	35	29	25	29	25	22	23	20	18
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	17	14
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17011	17011	17011
5°	17053	16424	16400
10°	16902	15868	15705
15°	16666	15289	14948
20°	16397	14649	14199
25°	16048	13971	13398
30°	15667	13270	12555
35°	15267	12554	11718
40°	14848	11803	10894
45°	14389	11071	10033
50°	13921	10253	9168
55°	13321	9403	8294
60°	12702	8465	7362
65°	12121	7450	6390
70°	11285	6325	5257
75°	10080	5009	4081
80°	8703	3521	2886
85°	6791	1891	1445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14389 cd/sqm

TEST NUMBER: P1031307

CATALOG NUMBER: S123DIW-B1000D1320UB35-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.0	1.6
10°-20°	420.7	4.5
20°-30°	621.3	6.6
30°-40°	725.6	7.7
40°-50°	729.5	7.7
50°-60°	640.8	6.8
60°-70°	477.3	5.1
70°-80°	271.6	2.9
80°-90°	80.7	0.9
90°-100°	61.3	0.7
100°-110°	296.5	3.1
110°-120°	726.6	7.7
120°-130°	922.4	9.8
130°-140°	985.3	10.5
140°-150°	921.4	9.8
150°-160°	743.2	7.9
160°-170°	479.6	5.1
170°-180°	165.3	1.8
0°-30°	1191.0	12.6
0°-40°	1916.6	20.4
0°-60°	3286.9	34.9
0°-90°	4116.5	43.7
90°-120°	1084.4	11.5
90°-150°	3913.5	41.6
90°-180°	5302.0	56.3
0°-180°	9418.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1580	1580	1580	1580	1580	
5°	1582	1575	1560	1574	1571	150
15°	1506	1500	1482	1493	1485	425
25°	1367	1359	1341	1343	1338	630
35°	1182	1174	1156	1148	1142	740
45°	969	963	946	930	923	748
55°	735	734	716	701	694	659
65°	501	495	481	470	466	495
75°	265	260	256	249	245	283
85°	71	68	68	65	65	76
90°	1	14	31	36	39	9
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: P1031307

CATALOG NUMBER: S123DIW-B1000D1320UB35-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1580.4	1580.4	1580.4	1580.4	1580.4
2.5°	1587.2	1581.7	1566.8	1580.4	1579.0
5°	1581.7	1574.9	1560.0	1573.6	1570.9
7.5°	1569.5	1562.7	1547.8	1560.0	1558.6
10°	1553.2	1546.4	1528.7	1541.0	1538.2
12.5°	1531.4	1526.0	1509.7	1517.9	1516.5
15°	1505.6	1500.2	1482.5	1493.4	1485.2
17.5°	1477.1	1470.3	1452.6	1460.8	1458.1
20°	1444.5	1436.3	1418.7	1424.1	1420.0
22.5°	1407.8	1399.6	1382.0	1386.1	1380.6
25°	1367.0	1358.9	1341.2	1342.6	1338.5
27.5°	1324.9	1316.7	1297.7	1299.1	1295.0
30°	1278.7	1271.9	1252.9	1252.9	1243.4
32.5°	1232.5	1223.0	1209.4	1199.9	1195.8
35°	1182.2	1174.1	1156.4	1148.2	1141.5
37.5°	1131.9	1121.1	1103.4	1093.9	1089.8
40°	1078.9	1070.8	1051.8	1040.9	1035.5
42.5°	1025.9	1016.4	997.4	986.5	981.1
45°	968.9	963.4	945.8	929.5	922.7
47.5°	913.2	905.0	888.7	872.4	867.0
50°	856.1	849.3	831.6	816.7	808.5
52.5°	796.3	792.2	773.2	761.0	752.8
55°	735.2	733.8	716.1	701.2	694.4
57.5°	678.1	672.6	659.1	645.5	637.3
60°	615.6	614.2	597.9	585.7	578.9
62.5°	559.9	555.8	539.5	527.2	523.2
65°	501.4	494.6	481.0	470.2	466.1
67.5°	438.9	433.5	422.6	413.1	407.7
70°	383.2	375.0	366.9	357.4	350.6
72.5°	324.8	319.3	309.8	301.7	299.0
75°	265.0	259.5	255.5	248.7	244.6
77.5°	212.0	209.3	203.8	198.4	198.4
80°	160.3	156.3	153.6	152.2	152.2
82.5°	110.1	110.1	110.1	107.4	106.0
85°	70.7	67.9	67.9	65.2	65.2
87.5°	35.3	31.3	29.9	28.5	28.5
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: P1031307

CATALOG NUMBER: S123DIW-B1000D1320UB35-4F0-XX-W2A-F

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)