

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: P1031308

Luminaire Tested: S123DIW-B1000D1320UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031308
REPORT IS A COMBINATION OF REPORTS P990631 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB35-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

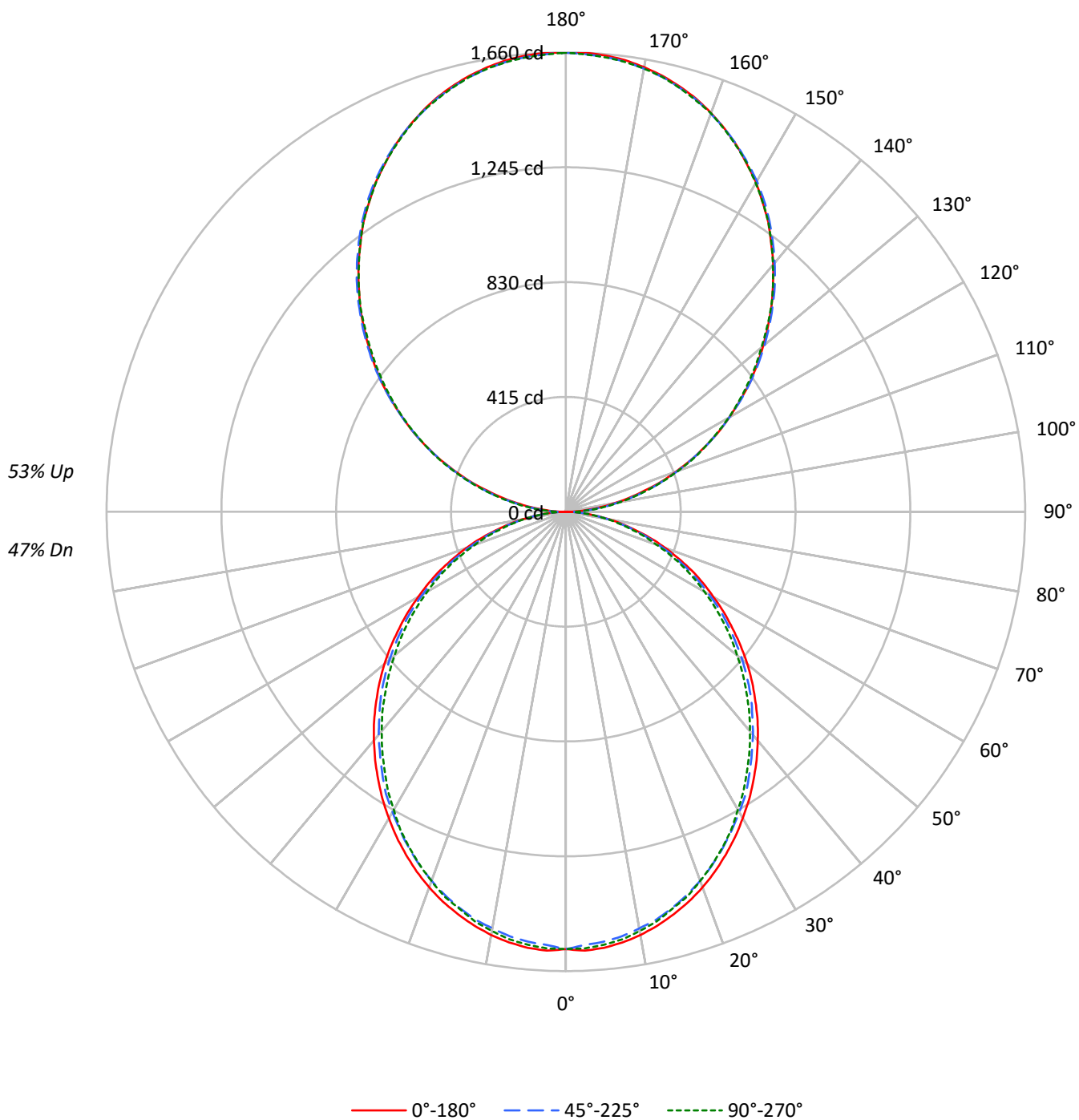
Lumens per Lamp: N/A
Luminaire Lumens: 8713.0 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	37	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°	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.0	1.7
10°-20°	420.7	4.8
20°-30°	621.3	7.1
30°-40°	725.6	8.3
40°-50°	729.5	8.4
50°-60°	640.8	7.4
60°-70°	477.3	5.5
70°-80°	271.6	3.1
80°-90°	80.7	0.9
90°-100°	106.8	1.2
100°-110°	323.2	3.7
110°-120°	550.2	6.3
120°-130°	723.9	8.3
130°-140°	813.7	9.3
140°-150°	799.9	9.2
150°-160°	673.4	7.7
160°-170°	448.3	5.1
170°-180°	157.0	1.8
0°-30°	1191.0	13.7
0°-40°	1916.6	22.0
0°-60°	3286.9	37.7
0°-90°	4116.5	47.2
90°-120°	980.2	11.3
90°-150°	3317.7	38.1
90°-180°	4596.0	52.7
0°-180°	8713.0	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	11
95°	77	86	96	102	102	85
105°	293	296	308	308	310	314
115°	554	558	555	556	555	548
125°	811	814	812	807	801	723
135°	1052	1060	1058	1053	1050	810
145°	1276	1278	1282	1281	1276	797
155°	1461	1461	1462	1467	1458	672
165°	1591	1587	1587	1595	1586	449
175°	1655	1650	1650	1658	1648	157
180°	1659	1659	1659	1659	1659	

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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	14.3	31.3	36.5	39.1
92.5°	39.1	46.9	54.7	58.6	56.0
95°	76.9	86.0	96.4	101.6	101.6
97.5°	126.4	132.9	140.7	147.3	146.0
100°	177.2	185.0	191.6	195.5	198.1
102.5°	235.9	239.8	248.9	252.8	251.5
105°	293.2	295.8	307.5	307.5	310.1
107.5°	361.0	362.3	367.5	371.4	370.1
110°	423.5	426.1	428.7	433.9	431.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.7	490.0	490.0	496.5	496.5
115°	553.8	557.7	555.1	556.4	555.1
117.5°	620.3	621.6	619.0	619.0	615.1
120°	681.5	689.4	682.8	681.5	678.9
122.5°	745.4	750.6	748.0	744.1	740.2
125°	810.6	814.5	811.9	806.6	801.4
127.5°	870.5	878.3	875.7	867.9	862.7
130°	930.4	940.9	937.0	931.7	922.6
132.5°	990.4	1000.8	998.2	991.7	985.2
135°	1051.6	1059.5	1058.1	1052.9	1050.3
137.5°	1107.7	1114.2	1118.1	1111.6	1107.7
140°	1166.3	1172.8	1174.1	1172.8	1163.7
142.5°	1219.7	1226.3	1228.9	1227.6	1221.0
145°	1275.8	1278.4	1282.3	1281.0	1275.8
147.5°	1324.0	1329.2	1333.1	1333.1	1325.3
150°	1374.8	1377.4	1380.0	1380.0	1372.2
152.5°	1416.5	1420.4	1421.7	1424.3	1417.8
155°	1460.8	1460.8	1462.1	1467.3	1458.2
157.5°	1498.6	1497.3	1498.6	1503.8	1496.0
160°	1533.8	1531.2	1531.2	1537.7	1532.5
162.5°	1565.1	1561.2	1562.5	1569.0	1559.9
165°	1591.1	1587.2	1587.2	1595.0	1585.9
167.5°	1613.3	1608.1	1609.4	1617.2	1609.4
170°	1631.5	1626.3	1626.3	1635.4	1626.3
172.5°	1645.9	1640.6	1640.6	1648.5	1639.3
175°	1655.0	1649.8	1649.8	1657.6	1648.5
177.5°	1660.2	1655.0	1655.0	1662.8	1653.7
180°	1658.9	1658.9	1658.9	1658.9	1658.9

(END OF REPORT)