

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: P1031443

Luminaire Tested: S123DIW-B1165D1320UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031443
REPORT IS A COMBINATION OF REPORTS P990948 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1320UB30-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

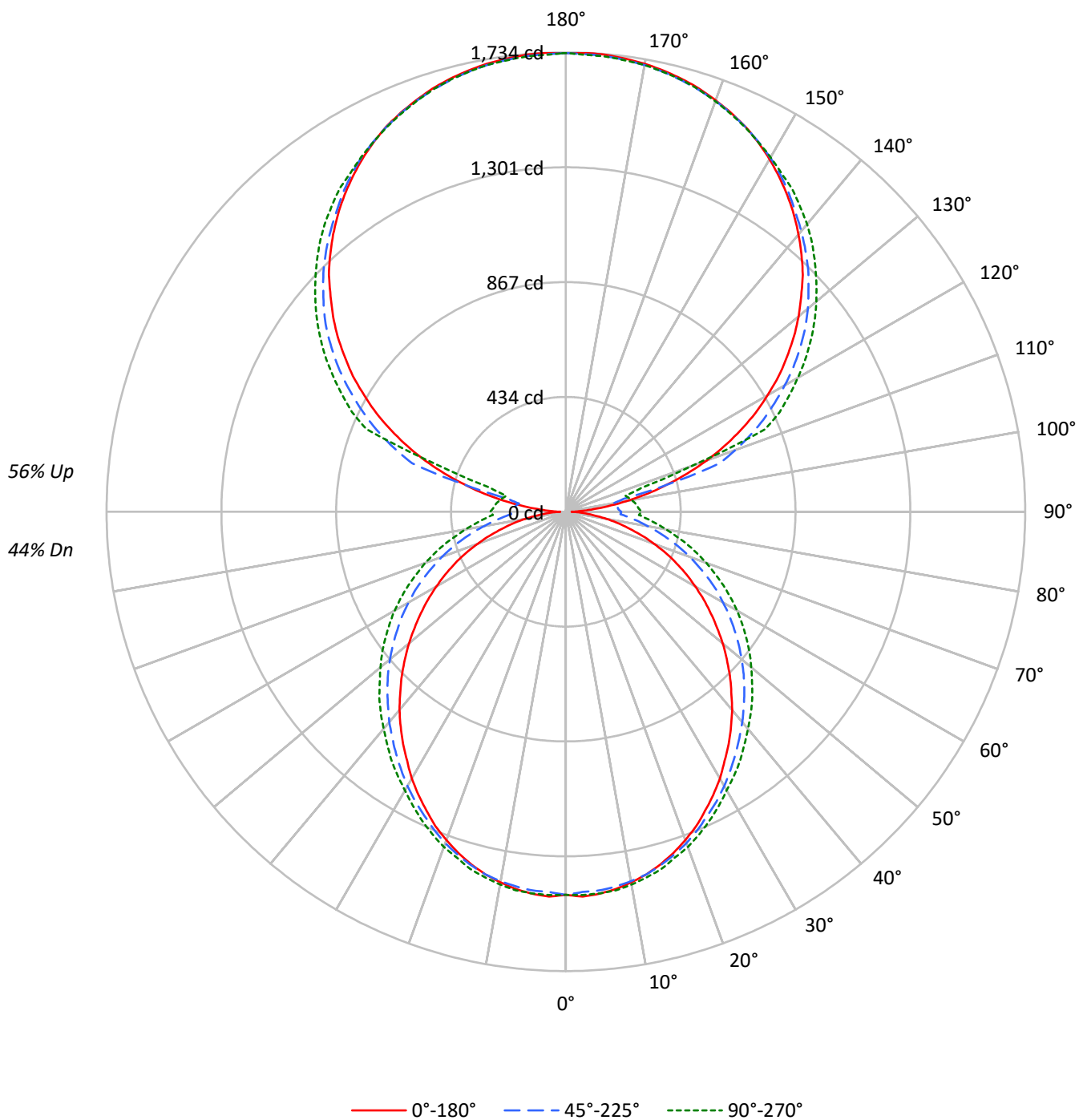
Lumens per Lamp: N/A
Luminaire Lumens: 10142.1 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 103.4
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	97	97	97	97	80	80	80	65	65	65	51	51	51
1	95	91	87	83	87	83	79	76	69	66	64	55	54	52	43	42	41
2	87	79	72	67	79	72	67	62	60	56	52	48	45	43	37	35	34
3	79	69	61	55	72	63	57	51	52	47	43	42	39	36	33	30	28
4	72	61	53	46	65	56	49	43	46	41	37	37	33	30	29	26	24
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	21
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	24	21	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	22	19	16
8	52	39	32	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	23	19	23	19	16	18	15	13
10	45	33	26	21	41	30	24	19	26	20	17	21	17	14	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15566	15566	15566
5°	15608	15109	15097
10°	15462	14700	14588
15°	15258	14248	14048
20°	14967	13744	13467
25°	14610	13176	12866
30°	14243	12663	12263
35°	13834	12125	11772
40°	13442	11631	11252
45°	13007	11155	10825
50°	12578	10683	10361
55°	12102	10197	9933
60°	11636	9701	9496
65°	11159	9174	8984
70°	10437	8581	8455
75°	9529	7906	7911
80°	8469	7223	7290
85°	7415	6667	6844

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13007 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	1.4
10°-20°	391.1	3.9
20°-30°	584.8	5.8
30°-40°	698.2	6.9
40°-50°	730.6	7.2
50°-60°	685.6	6.8
60°-70°	572.6	5.6
70°-80°	409.5	4.0
80°-90°	247.1	2.4
90°-100°	214.2	2.1
100°-110°	407.7	4.0
110°-120°	798.6	7.9
120°-130°	961.2	9.5
130°-140°	1000.3	9.9
140°-150°	921.4	9.1
150°-160°	740.0	7.3
160°-170°	477.5	4.7
170°-180°	164.6	1.6
0°-30°	1113.0	11.0
0°-40°	1811.3	17.9
0°-60°	3227.4	31.8
0°-90°	4456.6	43.9
90°-120°	1420.5	14.0
90°-150°	4303.4	42.4
90°-180°	5685.0	56.1
0°-180°	10142.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1448	1444	1435	1448	1446	137
15°	1378	1383	1382	1397	1396	388
25°	1244	1260	1265	1285	1285	574
35°	1071	1096	1117	1140	1147	670
45°	876	914	953	983	996	675
55°	668	720	777	819	832	598
65°	462	523	592	640	655	456
75°	250	324	403	455	474	268
85°	77	156	239	293	309	79
90°	22	112	209	268	286	19
95°	96	104	196	254	269	107
105°	396	448	400	216	233	419
115°	727	754	822	872	890	718
125°	1018	1029	1080	1115	1129	910
135°	1265	1271	1294	1326	1330	974
145°	1458	1465	1468	1483	1489	912
155°	1604	1602	1603	1609	1602	739
165°	1692	1688	1686	1697	1688	478
175°	1732	1725	1726	1735	1725	165
180°	1732	1732	1732	1732	1732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1446.1	1446.1	1446.1	1446.1	1446.1
2.5°	1454.0	1449.2	1436.6	1449.2	1447.7
5°	1447.7	1444.5	1435.1	1447.7	1446.1
7.5°	1436.6	1436.6	1427.2	1442.9	1441.4
10°	1420.9	1424.0	1416.2	1431.9	1428.8
12.5°	1402.0	1406.7	1402.0	1416.2	1413.0
15°	1378.4	1383.1	1381.5	1397.3	1395.7
17.5°	1350.0	1359.5	1357.9	1372.1	1368.9
20°	1318.5	1327.9	1331.1	1345.3	1346.8
22.5°	1285.4	1294.9	1299.6	1318.5	1316.9
25°	1244.5	1260.2	1264.9	1285.4	1285.4
27.5°	1205.1	1222.4	1231.9	1249.2	1250.8
30°	1162.5	1183.0	1195.6	1214.5	1214.5
32.5°	1115.3	1138.9	1156.2	1176.7	1181.4
35°	1071.2	1096.4	1116.9	1140.5	1146.8
37.5°	1023.9	1052.3	1075.9	1102.7	1107.4
40°	976.7	1005.0	1036.5	1063.3	1069.6
42.5°	924.7	960.9	994.0	1023.9	1033.4
45°	875.8	913.7	953.0	983.0	995.6
47.5°	823.9	866.4	910.5	943.6	953.0
50°	773.5	817.6	866.4	902.6	913.7
52.5°	719.9	767.2	822.3	860.1	874.3
55°	667.9	719.9	776.6	819.1	831.7
57.5°	617.5	671.1	732.5	775.0	789.2
60°	563.9	620.7	685.2	729.3	746.7
62.5°	513.5	571.8	641.1	685.2	701.0
65°	461.6	523.0	592.3	639.6	655.3
67.5°	409.6	474.2	543.5	595.4	608.1
70°	354.4	422.2	497.8	548.2	563.9
72.5°	304.0	371.8	450.5	502.5	518.3
75°	250.5	324.5	403.3	455.3	474.2
77.5°	204.8	278.8	357.6	412.7	426.9
80°	156.0	233.1	315.1	368.6	384.4
82.5°	113.4	192.2	275.7	329.2	345.0
85°	77.2	156.0	239.4	293.0	308.8
87.5°	47.3	126.0	206.4	259.9	275.7
90°	21.8	111.9	208.9	267.6	285.9
92.5°	48.5	108.5	198.8	259.9	275.3
95°	95.8	104.5	195.9	253.7	269.4
97.5°	158.6	179.3	187.7	245.3	262.2
100°	231.6	307.7	179.5	235.4	252.5
102.5°	314.9	375.7	222.8	224.4	242.8
105°	395.9	447.9	399.8	216.3	233.0
107.5°	480.5	525.2	609.1	453.5	299.2
110°	565.2	603.8	681.0	679.5	508.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	647.5	678.6	752.6	803.5	815.1
115°	727.0	753.6	821.9	872.5	890.3
117.5°	806.7	828.3	888.3	936.4	950.3
120°	878.5	897.9	953.8	1000.3	1011.3
122.5°	953.1	965.3	1019.2	1060.3	1072.6
125°	1018.4	1028.7	1079.5	1115.2	1128.8
127.5°	1085.3	1094.1	1139.8	1175.1	1183.7
130°	1147.0	1155.8	1192.4	1227.5	1234.3
132.5°	1204.7	1215.0	1242.4	1275.9	1283.1
135°	1265.1	1271.3	1293.7	1326.0	1329.9
137.5°	1316.6	1325.3	1338.9	1370.5	1375.8
140°	1366.5	1374.2	1382.7	1411.5	1416.8
142.5°	1414.0	1420.2	1424.0	1448.4	1452.4
145°	1457.8	1465.2	1467.8	1482.9	1489.2
147.5°	1498.6	1505.1	1507.6	1514.9	1514.8
150°	1537.2	1541.1	1543.7	1546.2	1545.6
152.5°	1572.0	1573.2	1574.5	1579.7	1573.2
155°	1604.1	1601.5	1602.8	1609.3	1601.5
157.5°	1629.8	1629.8	1628.6	1636.3	1626.0
160°	1653.0	1651.7	1650.4	1658.1	1649.1
162.5°	1674.9	1671.0	1669.7	1678.7	1671.0
165°	1691.6	1687.7	1686.4	1696.7	1687.7
167.5°	1705.7	1700.6	1700.6	1710.9	1700.6
170°	1717.3	1712.2	1712.2	1722.5	1712.2
172.5°	1725.0	1718.6	1719.9	1730.2	1718.6
175°	1731.5	1725.0	1726.3	1735.3	1725.0
177.5°	1734.0	1727.6	1728.9	1739.2	1726.3
180°	1731.5	1731.5	1731.5	1731.5	1731.5

(END OF REPORT)