

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: P1031299

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031299
REPORT IS A COMBINATION OF REPORTS P990618 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-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

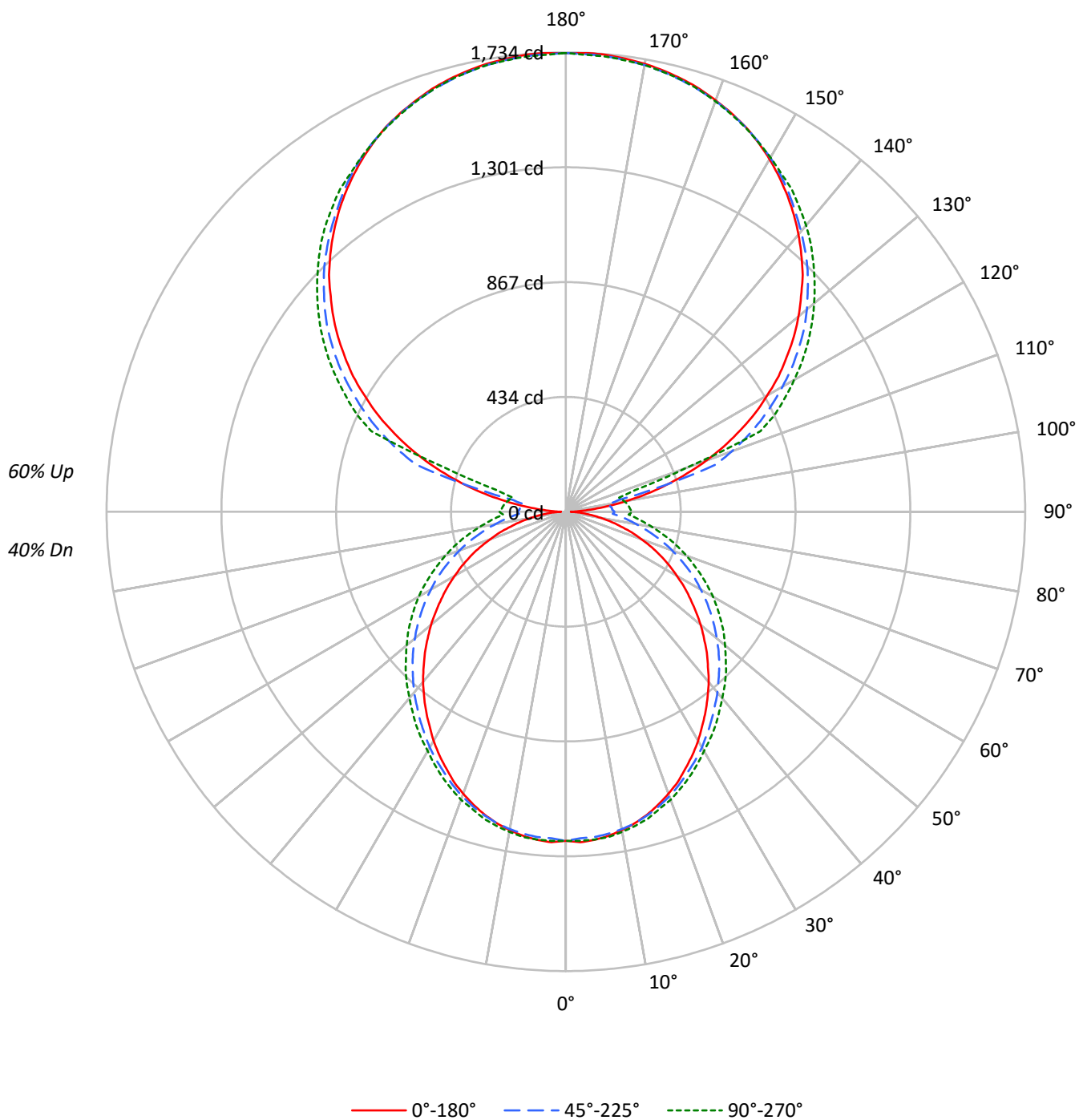
Lumens per Lamp: N/A
Luminaire Lumens: 9456.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13369	13369	13369
5°	13405	12976	12966
10°	13279	12625	12529
15°	13104	12237	12065
20°	12854	11804	11566
25°	12548	11317	11051
30°	12233	10876	10532
35°	11881	10413	10110
40°	11544	9989	9664
45°	11171	9580	9297
50°	10802	9175	8898
55°	10393	8758	8531
60°	9993	8332	8156
65°	9582	7879	7716
70°	8964	7369	7261
75°	8182	6788	6793
80°	7269	6203	6260
85°	6368	5725	5878

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11171 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	1.2
10°-20°	335.9	3.6
20°-30°	502.3	5.3
30°-40°	599.7	6.3
40°-50°	627.4	6.6
50°-60°	588.8	6.2
60°-70°	491.8	5.2
70°-80°	351.7	3.7
80°-90°	212.7	2.2
90°-100°	192.6	2.0
100°-110°	391.9	4.1
110°-120°	788.0	8.3
120°-130°	955.2	10.1
130°-140°	997.6	10.5
140°-150°	920.8	9.7
150°-160°	740.0	7.8
160°-170°	477.5	5.1
170°-180°	164.6	1.7
0°-30°	955.9	10.1
0°-40°	1555.6	16.5
0°-60°	2771.8	29.3
0°-90°	3828.0	40.5
90°-120°	1372.4	14.5
90°-150°	4246.0	44.9
90°-180°	5628.0	59.5
0°-180°	9456.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1242	1242	1242	1242	1242	
5°	1243	1241	1232	1243	1242	118
15°	1184	1188	1186	1200	1199	333
25°	1069	1082	1086	1104	1104	493
35°	920	942	959	980	985	575
45°	752	785	818	844	855	580
55°	574	618	667	704	714	514
65°	396	449	509	549	563	392
75°	215	279	346	391	407	230
85°	66	134	206	252	265	68
90°	19	98	184	235	251	17
95°	93	93	174	225	238	105
105°	394	441	383	193	208	417
115°	726	750	810	855	871	717
125°	1018	1028	1072	1103	1116	910
135°	1265	1271	1291	1319	1322	974
145°	1458	1465	1468	1481	1486	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°	1242.0	1242.0	1242.0	1242.0	1242.0
2.5°	1248.7	1244.7	1233.9	1244.7	1243.3
5°	1243.3	1240.6	1232.5	1243.3	1242.0
7.5°	1233.9	1233.9	1225.7	1239.3	1237.9
10°	1220.3	1223.0	1216.3	1229.8	1227.1
12.5°	1204.1	1208.1	1204.1	1216.3	1213.6
15°	1183.8	1187.9	1186.5	1200.0	1198.7
17.5°	1159.4	1167.6	1166.2	1178.4	1175.7
20°	1132.4	1140.5	1143.2	1155.4	1156.7
22.5°	1104.0	1112.1	1116.2	1132.4	1131.0
25°	1068.8	1082.3	1086.4	1104.0	1104.0
27.5°	1035.0	1049.9	1058.0	1072.9	1074.2
30°	998.4	1016.0	1026.9	1043.1	1043.1
32.5°	957.9	978.2	993.0	1010.6	1014.7
35°	920.0	941.6	959.2	979.5	984.9
37.5°	879.4	903.7	924.0	947.0	951.1
40°	838.8	863.2	890.2	913.2	918.6
42.5°	794.2	825.3	853.7	879.4	887.5
45°	752.2	784.7	818.5	844.2	855.0
47.5°	707.6	744.1	782.0	810.4	818.5
50°	664.3	702.2	744.1	775.2	784.7
52.5°	618.3	658.9	706.2	738.7	750.9
55°	573.6	618.3	667.0	703.5	714.3
57.5°	530.3	576.3	629.1	665.6	677.8
60°	484.3	533.0	588.5	626.4	641.3
62.5°	441.0	491.1	550.6	588.5	602.0
65°	396.4	449.2	508.7	549.3	562.8
67.5°	351.8	407.2	466.8	511.4	522.2
70°	304.4	362.6	427.5	470.8	484.3
72.5°	261.1	319.3	386.9	431.6	445.1
75°	215.1	278.7	346.3	391.0	407.2
77.5°	175.9	239.5	307.1	354.5	366.6
80°	133.9	200.2	270.6	316.6	330.1
82.5°	97.4	165.1	236.8	282.8	296.3
85°	66.3	133.9	205.6	251.6	265.2
87.5°	40.6	108.2	177.2	223.2	236.8
90°	18.9	98.1	183.8	234.9	251.0
92.5°	45.8	96.3	175.5	229.2	242.6
95°	93.4	93.3	173.8	224.8	238.3
97.5°	156.3	169.0	167.0	217.9	232.6
100°	229.6	298.6	160.2	209.6	224.5
102.5°	313.1	367.7	204.8	200.2	216.3
105°	394.1	440.8	383.2	193.3	208.1
107.5°	479.0	519.0	593.8	432.2	275.9
110°	563.8	598.5	666.8	659.5	486.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	646.1	674.2	739.7	785.1	794.7
115°	725.9	749.8	810.1	855.4	871.4
117.5°	805.6	825.4	877.9	920.7	932.8
120°	877.6	895.9	944.4	985.8	995.3
122.5°	952.2	963.9	1011.0	1047.2	1057.9
125°	1017.8	1028.1	1072.4	1103.4	1115.5
127.5°	1084.7	1093.6	1133.8	1164.7	1171.7
130°	1146.4	1155.3	1187.5	1218.4	1223.9
132.5°	1204.2	1214.5	1238.6	1268.2	1273.7
135°	1264.6	1271.1	1291.0	1319.3	1322.2
137.5°	1316.1	1325.1	1337.1	1365.2	1369.3
140°	1366.3	1374.0	1381.8	1407.3	1411.5
142.5°	1413.8	1420.2	1424.0	1445.5	1448.4
145°	1457.6	1465.2	1467.8	1481.1	1486.5
147.5°	1498.6	1505.1	1507.6	1514.3	1513.3
150°	1537.2	1541.1	1543.7	1546.2	1545.1
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)