

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: P1031294

Luminaire Tested: S123DIW-B1000D1320UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031294
REPORT IS A COMBINATION OF REPORTS P990589 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB27-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

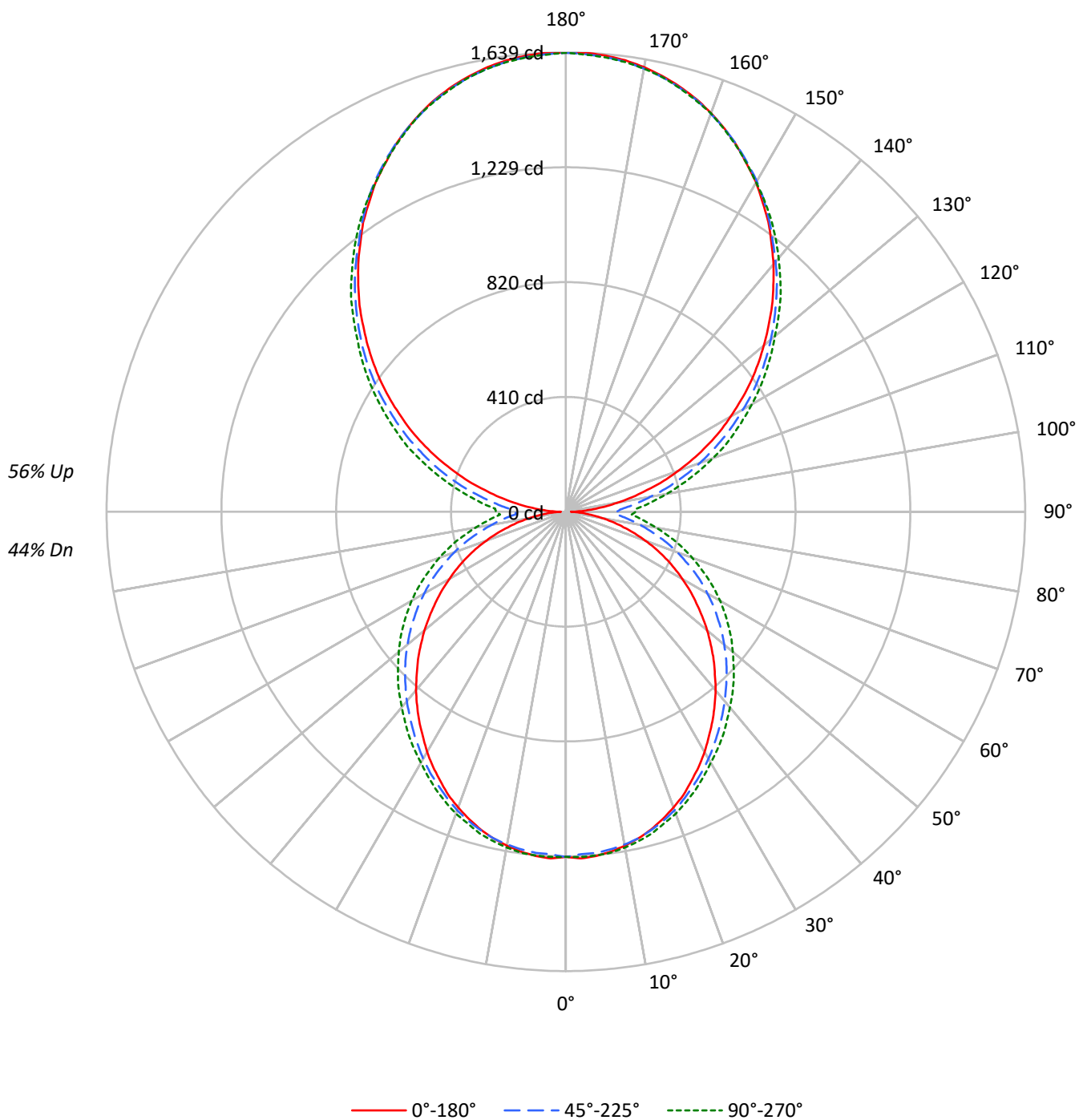
Lumens per Lamp: N/A
Luminaire Lumens: 8679.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80		64	64	64		50
1	95	91	87	83	87	83	79	76	69	66	64		55	53	52		43
2	87	79	72	67	79	72	66	62	60	55	52		48	45	43		37
3	79	69	61	55	72	63	56	51	52	47	43		42	39	36		33
4	72	61	53	46	65	56	49	43	46	41	37		37	33	30		29
5	66	54	46	40	60	50	42	37	41	36	31		33	29	26		26
6	61	48	40	34	55	44	37	32	37	31	27		30	26	23		24
7	56	43	35	30	51	40	33	28	33	28	24		27	23	20		22
8	52	39	32	26	47	36	29	24	30	25	21		25	21	18		20
9	48	36	28	23	44	33	26	22	28	22	19		23	19	16		18
10	45	33	26	21	41	30	24	19	26	20	17		21	17	14		17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13254	13254	13254
5°	13289	12864	12854
10°	13165	12516	12420
15°	12991	12131	11960
20°	12743	11702	11467
25°	12439	11219	10956
30°	12127	10782	10442
35°	11778	10323	10023
40°	11445	9903	9581
45°	11075	9499	9217
50°	10708	9096	8821
55°	10304	8682	8458
60°	9909	8260	8084
65°	9500	7811	7650
70°	8888	7306	7200
75°	8114	6732	6735
80°	7210	6147	6207
85°	6311	5678	5827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11075 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.3
10°-20°	333.0	3.8
20°-30°	497.9	5.7
30°-40°	594.5	6.8
40°-50°	622.0	7.2
50°-60°	583.7	6.7
60°-70°	487.5	5.6
70°-80°	348.6	4.0
80°-90°	210.9	2.4
90°-100°	235.8	2.7
100°-110°	414.9	4.8
110°-120°	607.2	7.0
120°-130°	751.1	8.7
130°-140°	819.6	9.4
140°-150°	793.1	9.1
150°-160°	664.8	7.7
160°-170°	442.6	5.1
170°-180°	155.0	1.8
0°-30°	947.7	10.9
0°-40°	1542.2	17.8
0°-60°	2747.9	31.7
0°-90°	3795.0	43.7
90°-120°	1257.8	14.5
90°-150°	3621.6	41.7
90°-180°	4884.0	56.3
0°-180°	8679.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1233	1230	1222	1233	1231	117
15°	1174	1178	1176	1190	1188	331
25°	1060	1073	1077	1094	1094	488
35°	912	934	951	971	976	570
45°	746	778	812	837	848	575
55°	569	613	661	697	708	509
65°	393	445	504	544	558	388
75°	213	276	343	388	404	228
85°	66	133	204	250	263	68
90°	19	97	182	233	249	18
95°	91	152	228	275	288	95
105°	300	335	404	442	456	321
115°	553	573	619	653	662	548
125°	804	808	844	867	872	718
135°	1041	1047	1061	1080	1084	802
145°	1261	1262	1266	1275	1276	787
155°	1442	1442	1443	1448	1440	664
165°	1571	1567	1567	1575	1566	443
175°	1634	1629	1629	1636	1627	155
180°	1638	1638	1638	1638	1638	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.3	1231.3	1231.3	1231.3	1231.3
2.5°	1238.0	1233.9	1223.2	1233.9	1232.6
5°	1232.6	1229.9	1221.9	1232.6	1231.3
7.5°	1223.2	1223.2	1215.2	1228.6	1227.2
10°	1209.8	1212.5	1205.8	1219.2	1216.5
12.5°	1193.7	1197.7	1193.7	1205.8	1203.1
15°	1173.6	1177.6	1176.3	1189.7	1188.3
17.5°	1149.4	1157.5	1156.2	1168.2	1165.5
20°	1122.6	1130.7	1133.3	1145.4	1146.8
22.5°	1094.5	1102.5	1106.5	1122.6	1121.3
25°	1059.6	1073.0	1077.0	1094.5	1094.5
27.5°	1026.1	1040.8	1048.9	1063.6	1064.9
30°	989.8	1007.3	1018.0	1034.1	1034.1
32.5°	949.6	969.7	984.5	1001.9	1005.9
35°	912.0	933.5	950.9	971.1	976.4
37.5°	871.8	895.9	916.1	938.9	942.9
40°	831.6	855.7	882.5	905.3	910.7
42.5°	787.3	818.2	846.3	871.8	879.9
45°	745.7	777.9	811.5	836.9	847.7
47.5°	701.5	737.7	775.2	803.4	811.5
50°	658.5	696.1	737.7	768.5	777.9
52.5°	612.9	653.2	700.1	732.3	744.4
55°	568.7	612.9	661.2	697.4	708.2
57.5°	525.8	571.4	623.7	659.9	672.0
60°	480.2	528.4	583.4	621.0	635.7
62.5°	437.2	486.9	545.9	583.4	596.9
65°	393.0	445.3	504.3	544.5	558.0
67.5°	348.7	403.7	462.7	507.0	517.7
70°	301.8	359.5	423.8	466.8	480.2
72.5°	258.9	316.5	383.6	427.9	441.3
75°	213.3	276.3	343.4	387.6	403.7
77.5°	174.4	237.4	304.5	351.4	363.5
80°	132.8	198.5	268.2	313.9	327.3
82.5°	96.6	163.6	234.7	280.3	293.7
85°	65.7	132.8	203.9	249.5	262.9
87.5°	40.2	107.3	175.7	221.3	234.7
90°	18.7	97.4	182.5	233.2	249.2
92.5°	54.7	120.1	194.8	243.0	252.5
95°	90.7	152.0	228.0	274.7	288.1
97.5°	138.2	192.9	263.6	310.4	322.5
100°	187.1	237.7	305.8	348.6	364.5
102.5°	243.5	285.0	354.3	395.8	407.9
105°	300.1	334.9	404.2	441.7	456.4
107.5°	365.7	395.2	455.3	495.4	506.1
110°	426.1	452.9	509.0	549.1	557.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	490.4	510.5	561.5	601.4	613.5
115°	553.4	573.4	619.1	652.6	662.0
117.5°	619.0	631.0	674.1	706.3	713.2
120°	678.2	692.6	730.4	760.0	766.8
122.5°	741.2	749.0	788.0	813.6	819.2
125°	804.2	808.0	844.3	867.4	871.7
127.5°	863.3	869.7	900.7	919.8	924.0
130°	922.5	931.5	954.4	974.8	973.8
132.5°	980.4	990.7	1008.2	1025.9	1028.8
135°	1040.8	1047.2	1060.7	1079.6	1083.8
137.5°	1096.2	1101.2	1114.5	1129.5	1132.4
140°	1152.6	1159.1	1164.5	1183.3	1181.0
142.5°	1205.4	1210.5	1213.1	1229.2	1229.5
145°	1260.7	1262.0	1265.8	1275.3	1275.5
147.5°	1307.0	1312.2	1316.0	1320.0	1317.7
150°	1357.2	1359.7	1362.3	1362.3	1357.3
152.5°	1398.3	1402.2	1403.5	1406.1	1399.6
155°	1442.1	1442.1	1443.4	1448.5	1439.5
157.5°	1479.4	1478.1	1479.4	1484.5	1476.8
160°	1514.1	1511.5	1511.5	1518.0	1512.8
162.5°	1545.0	1541.1	1542.4	1548.9	1539.8
165°	1570.7	1566.9	1566.9	1574.6	1565.6
167.5°	1592.6	1587.4	1588.7	1596.5	1588.7
170°	1610.6	1605.5	1605.5	1614.5	1605.5
172.5°	1624.8	1619.6	1619.6	1627.3	1618.3
175°	1633.8	1628.6	1628.6	1636.3	1627.3
177.5°	1638.9	1633.8	1633.8	1641.5	1632.5
180°	1637.6	1637.6	1637.6	1637.6	1637.6

(END OF REPORT)