

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: P1031284

Luminaire Tested: S123DIW-B1000D1030UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031284
REPORT IS A COMBINATION OF REPORTS P990574 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1030UB40-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

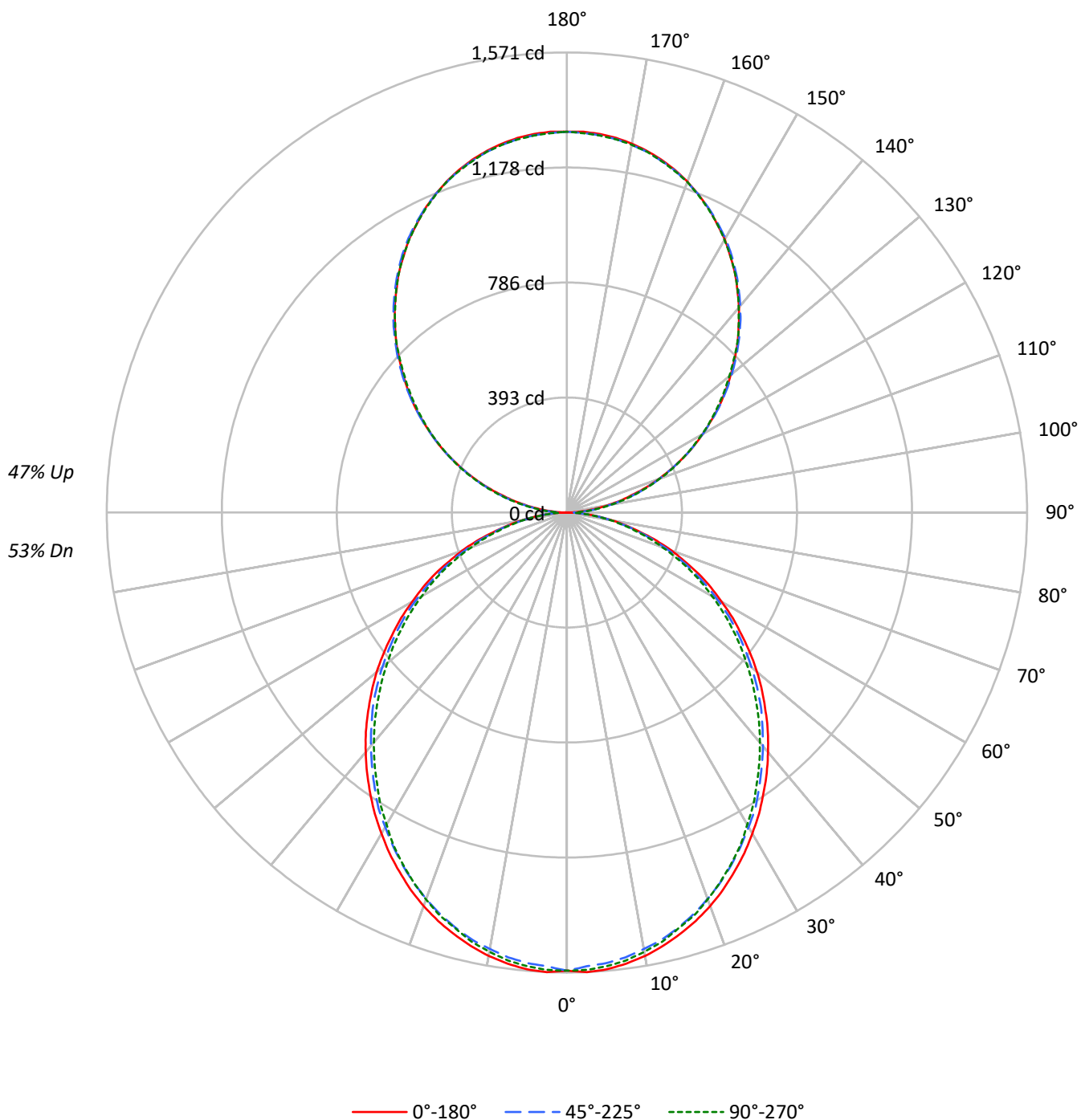
Lumens per Lamp: N/A
Luminaire Lumens: 7678.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	98	94	90	87	91	87	84	81	74	72	70	63	61	59	52	51	50
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42
3	82	72	65	59	75	67	61	55	58	53	48	49	45	42	40	38	36
4	75	64	56	50	69	59	52	47	51	46	41	43	39	36	36	33	31
5	69	57	49	43	63	53	46	40	46	40	36	39	35	31	33	29	27
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	30	26	23
7	58	46	38	32	54	43	36	31	37	32	27	32	27	24	27	24	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	25	21	19
9	51	38	31	26	47	36	29	24	31	26	22	27	23	19	23	19	17
10	47	35	28	23	44	33	26	22	29	23	20	25	21	17	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16841	16841	16841
5°	16884	16260	16236
10°	16733	15710	15549
15°	16500	15138	14799
20°	16234	14502	14058
25°	15889	13832	13264
30°	15511	13138	12430
35°	15115	12429	11601
40°	14701	11685	10784
45°	14245	10959	9933
50°	13783	10151	9078
55°	13187	9310	8211
60°	12575	8380	7288
65°	12000	7375	6326
70°	11173	6261	5204
75°	9978	4958	4041
80°	8616	3484	2858
85°	6724	1874	1432

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14245 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	1.9
10°-20°	416.5	5.4
20°-30°	615.1	8.0
30°-40°	718.4	9.4
40°-50°	722.2	9.4
50°-60°	634.4	8.3
60°-70°	472.5	6.2
70°-80°	268.9	3.5
80°-90°	79.2	1.0
90°-100°	83.7	1.1
100°-110°	253.4	3.3
110°-120°	431.3	5.6
120°-130°	567.5	7.4
130°-140°	637.8	8.3
140°-150°	627.1	8.2
150°-160°	527.9	6.9
160°-170°	351.5	4.6
170°-180°	123.1	1.6
0°-30°	1179.1	15.4
0°-40°	1897.5	24.7
0°-60°	3254.2	42.4
0°-90°	4074.7	53.1
90°-120°	768.4	10.0
90°-150°	2600.8	33.9
90°-180°	3603.0	46.9
0°-180°	7678.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1565	1565	1565	1565	1565	
5°	1566	1559	1544	1558	1555	149
15°	1491	1485	1468	1478	1470	420
25°	1353	1345	1328	1329	1325	623
35°	1170	1162	1145	1137	1130	732
45°	959	954	936	920	914	741
55°	728	726	709	694	688	652
65°	496	490	476	466	461	490
75°	262	257	253	246	242	280
85°	70	67	67	65	65	75
90°	1	11	24	29	31	9
95°	60	67	76	80	80	66
105°	230	232	241	241	243	246
115°	434	437	435	436	435	430
125°	635	638	636	632	628	567
135°	824	830	830	825	823	635
145°	1000	1002	1005	1004	1000	625
155°	1145	1145	1146	1150	1143	527
165°	1247	1244	1244	1250	1243	352
175°	1297	1293	1293	1299	1292	123
180°	1300	1300	1300	1300	1300	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1564.6	1564.6	1564.6	1564.6	1564.6
2.5°	1571.3	1566.0	1551.2	1564.6	1563.3
5°	1566.0	1559.2	1544.4	1557.9	1555.2
7.5°	1553.9	1547.1	1532.3	1544.4	1543.1
10°	1537.7	1531.0	1513.5	1525.6	1522.9
12.5°	1516.2	1510.8	1494.7	1502.7	1501.4
15°	1490.6	1485.2	1467.8	1478.5	1470.4
17.5°	1462.4	1455.6	1438.2	1446.2	1443.5
20°	1430.1	1422.0	1404.5	1409.9	1405.9
22.5°	1393.8	1385.7	1368.2	1372.2	1366.9
25°	1353.4	1345.3	1327.8	1329.2	1325.1
27.5°	1311.7	1303.6	1284.8	1286.1	1282.1
30°	1266.0	1259.2	1240.4	1240.4	1231.0
32.5°	1220.2	1210.8	1197.3	1187.9	1183.9
35°	1170.4	1162.4	1144.9	1136.8	1130.1
37.5°	1120.7	1109.9	1092.4	1083.0	1079.0
40°	1068.2	1060.1	1041.3	1030.5	1025.1
42.5°	1015.7	1006.3	987.5	976.7	971.3
45°	959.2	953.8	936.3	920.2	913.5
47.5°	904.1	896.0	879.8	863.7	858.3
50°	847.6	840.8	823.3	808.5	800.5
52.5°	788.4	784.3	765.5	753.4	745.3
55°	727.8	726.5	709.0	694.2	687.5
57.5°	671.3	665.9	652.5	639.0	631.0
60°	609.4	608.1	591.9	579.8	573.1
62.5°	554.3	550.2	534.1	522.0	518.0
65°	496.4	489.7	476.2	465.5	461.4
67.5°	434.5	429.2	418.4	409.0	403.6
70°	379.4	371.3	363.2	353.8	347.1
72.5°	321.5	316.2	306.7	298.7	296.0
75°	262.3	257.0	252.9	246.2	242.2
77.5°	209.9	207.2	201.8	196.4	196.4
80°	158.7	154.7	152.0	150.7	150.7
82.5°	109.0	109.0	109.0	106.3	104.9
85°	70.0	67.3	67.3	64.6	64.6
87.5°	35.0	30.9	29.6	28.3	28.3
90°	1.0	11.2	24.5	28.6	30.6
92.5°	30.6	36.8	42.9	46.0	43.9
95°	60.3	67.4	75.6	79.7	79.7
97.5°	99.1	104.2	110.3	115.4	114.4
100°	138.9	145.1	150.2	153.2	155.3
102.5°	184.9	188.0	195.1	198.2	197.2
105°	229.8	231.9	241.1	241.1	243.1
107.5°	283.0	284.0	288.1	291.1	290.1
110°	332.0	334.0	336.1	340.2	338.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	383.1	384.1	384.1	389.2	389.2
115°	434.2	437.2	435.2	436.2	435.2
117.5°	486.3	487.3	485.2	485.2	482.2
120°	534.3	540.4	535.3	534.3	532.2
122.5°	584.3	588.4	586.4	583.3	580.2
125°	635.4	638.5	636.4	632.3	628.3
127.5°	682.4	688.5	686.5	680.3	676.3
130°	729.4	737.6	734.5	730.4	723.3
132.5°	776.4	784.5	782.5	777.4	772.3
135°	824.4	830.5	829.5	825.4	823.4
137.5°	868.3	873.4	876.5	871.4	868.3
140°	914.3	919.4	920.4	919.4	912.2
142.5°	956.2	961.3	963.3	962.3	957.2
145°	1000.1	1002.1	1005.2	1004.2	1000.1
147.5°	1037.9	1042.0	1045.0	1045.0	1038.9
150°	1077.7	1079.8	1081.8	1081.8	1075.7
152.5°	1110.4	1113.5	1114.5	1116.6	1111.4
155°	1145.2	1145.2	1146.2	1150.3	1143.1
157.5°	1174.8	1173.8	1174.8	1178.9	1172.7
160°	1202.4	1200.3	1200.3	1205.4	1201.3
162.5°	1226.9	1223.8	1224.8	1229.9	1222.8
165°	1247.3	1244.2	1244.2	1250.4	1243.2
167.5°	1264.7	1260.6	1261.6	1267.7	1261.6
170°	1279.0	1274.9	1274.9	1282.0	1274.9
172.5°	1290.2	1286.1	1286.1	1292.3	1285.1
175°	1297.4	1293.3	1293.3	1299.4	1292.3
177.5°	1301.4	1297.4	1297.4	1303.5	1296.3
180°	1300.4	1300.4	1300.4	1300.4	1300.4

(END OF REPORT)