

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: P1031283

Luminaire Tested: S123DIW-B1000D1030UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031283
REPORT IS A COMBINATION OF REPORTS P990571 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-D1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

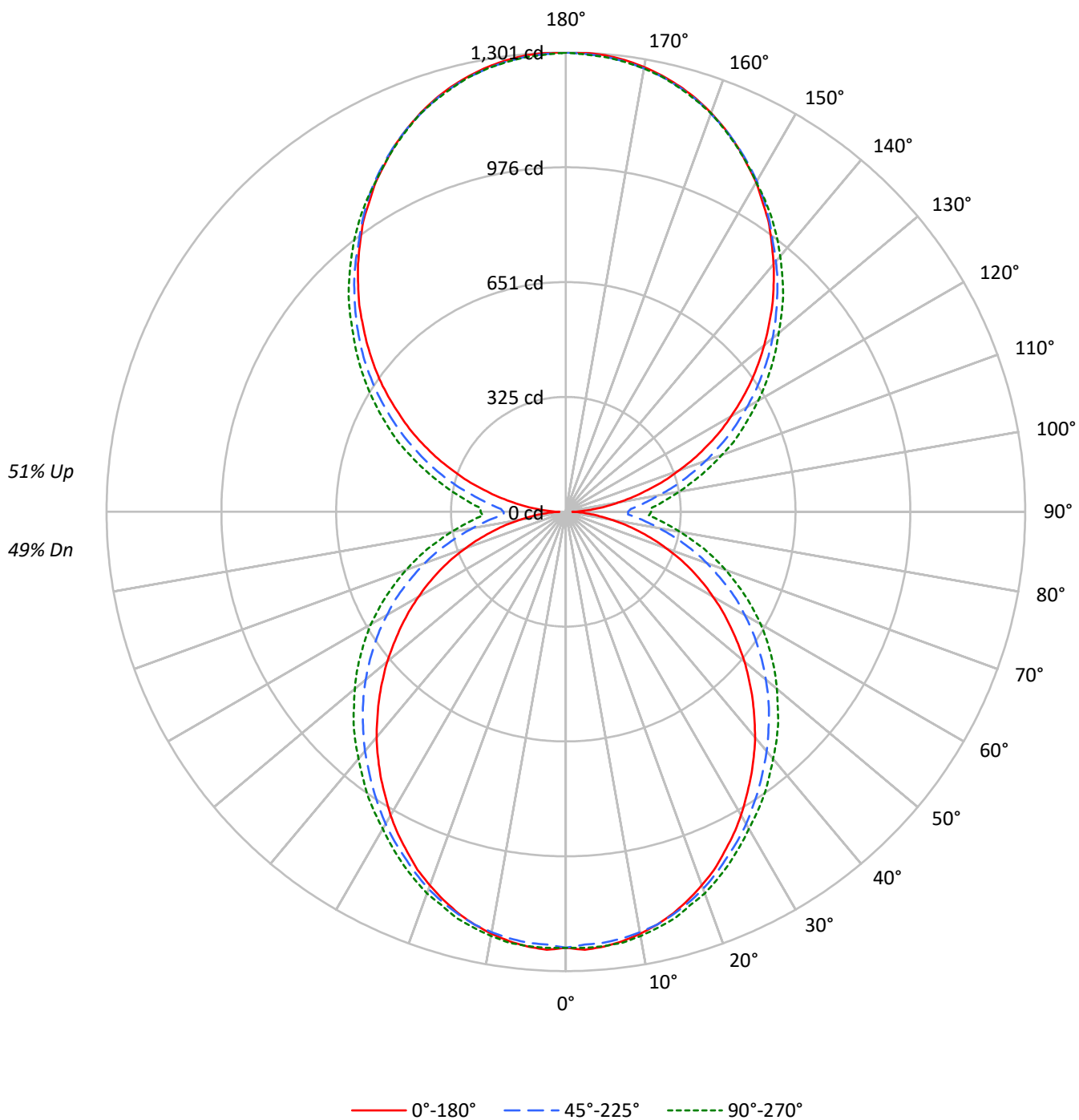
Lumens per Lamp: N/A
Luminaire Lumens: 7756.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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

TEST NUMBER: P1031283

CATALOG NUMBER: S123DIW-B1000D1030UB40-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1031283

CATALOG NUMBER: S123DIW-B1000D1030UB40-4F0-XX-W2A-D1

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	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	83	83	83	68	68	68	55	55	55	49		
1	97	92	87	84	89	85	81	77	71	68	66	59	57	55	47	46	45	39		
2	87	80	73	67	80	73	68	63	62	57	54	51	48	45	41	39	37	32		
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31	27		
4	73	61	53	47	66	57	49	44	48	42	38	40	35	32	32	29	26	23		
5	67	55	46	40	61	50	43	37	43	37	32	35	31	28	29	25	23	19		
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	23	20	17		
7	57	44	36	30	52	41	33	28	35	29	25	29	24	21	24	20	18	15		
8	52	40	32	27	48	37	30	25	32	26	22	26	22	19	22	18	16	13		
9	49	36	29	24	45	34	27	22	29	23	19	24	20	17	20	17	14	12		
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	19	15	13	11		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13291	13291	13291
5°	13328	12901	12891
10°	13203	12552	12456
15°	13029	12166	11995
20°	12781	11736	11500
25°	12476	11251	10987
30°	12163	10814	10472
35°	11813	10353	10053
40°	11478	9932	9608
45°	11107	9525	9243
50°	10741	9122	8847
55°	10333	8708	8482
60°	9937	8284	8108
65°	9527	7834	7672
70°	8914	7328	7221
75°	8137	6751	6755
80°	7231	6166	6224
85°	6330	5695	5843

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11107 cd/sqm

TEST NUMBER: P1031283

CATALOG NUMBER: S123DIW-B1000D1030UB40-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	1.5
10°-20°	333.9	4.3
20°-30°	499.4	6.4
30°-40°	596.2	7.7
40°-50°	623.8	8.0
50°-60°	585.4	7.5
60°-70°	489.0	6.3
70°-80°	349.6	4.5
80°-90°	210.8	2.7
90°-100°	214.4	2.8
100°-110°	349.5	4.5
110°-120°	495.5	6.4
120°-130°	604.1	7.8
130°-140°	654.3	8.4
140°-150°	630.5	8.1
150°-160°	528.0	6.8
160°-170°	351.5	4.5
170°-180°	123.1	1.6
0°-30°	950.4	12.3
0°-40°	1546.6	19.9
0°-60°	2755.9	35.5
0°-90°	3805.3	49.1
90°-120°	1059.4	13.7
90°-150°	2948.3	38.0
90°-180°	3951.0	50.9
0°-180°	7756.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1236	1234	1225	1236	1235	117
15°	1177	1181	1180	1193	1192	332
25°	1063	1076	1080	1098	1098	490
35°	915	936	954	974	979	572
45°	748	780	814	839	850	577
55°	570	615	663	700	710	511
65°	394	447	506	546	560	390
75°	214	277	344	389	405	228
85°	66	133	204	250	264	68
90°	18	95	176	226	242	17
95°	75	135	209	255	268	78
105°	241	275	342	380	394	257
115°	441	460	506	540	550	437
125°	639	642	679	704	709	571
135°	827	832	846	866	870	637
145°	1001	1002	1005	1015	1016	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	

TEST NUMBER: P1031283

CATALOG NUMBER: S123DIW-B1000D1030UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1234.8	1234.8	1234.8	1234.8	1234.8
2.5°	1241.6	1237.5	1226.8	1237.5	1236.2
5°	1236.2	1233.5	1225.4	1236.2	1234.8
7.5°	1226.8	1226.8	1218.7	1232.1	1230.8
10°	1213.3	1216.0	1209.3	1222.7	1220.0
12.5°	1197.2	1201.2	1197.2	1209.3	1206.6
15°	1177.0	1181.0	1179.7	1193.1	1191.8
17.5°	1152.8	1160.8	1159.5	1171.6	1168.9
20°	1125.9	1133.9	1136.6	1148.7	1150.1
22.5°	1097.6	1105.7	1109.7	1125.9	1124.5
25°	1062.7	1076.1	1080.1	1097.6	1097.6
27.5°	1029.0	1043.8	1051.9	1066.7	1068.0
30°	992.7	1010.2	1021.0	1037.1	1037.1
32.5°	952.4	972.5	987.3	1004.8	1008.8
35°	914.7	936.2	953.7	973.9	979.3
37.5°	874.3	898.5	918.7	941.6	945.6
40°	834.0	858.2	885.1	908.0	913.3
42.5°	789.6	820.5	848.8	874.3	882.4
45°	747.9	780.2	813.8	839.4	850.1
47.5°	703.5	739.8	777.5	805.7	813.8
50°	660.5	698.1	739.8	770.8	780.2
52.5°	614.7	655.1	702.2	734.4	746.5
55°	570.3	614.7	663.2	699.5	710.2
57.5°	527.3	573.0	625.5	661.8	673.9
60°	481.6	530.0	585.1	622.8	637.6
62.5°	438.5	488.3	547.5	585.1	598.6
65°	394.1	446.6	505.8	546.1	559.6
67.5°	349.7	404.9	464.1	508.5	519.2
70°	302.7	360.5	425.1	468.1	481.6
72.5°	259.6	317.5	384.7	429.1	442.5
75°	213.9	277.1	344.4	388.7	404.9
77.5°	174.9	238.1	305.3	352.4	364.5
80°	133.2	199.1	269.0	314.8	328.2
82.5°	96.8	164.1	235.4	281.1	294.6
85°	65.9	133.2	204.5	250.2	263.6
87.5°	40.4	107.6	176.2	221.9	235.4
90°	18.5	94.6	176.5	226.3	241.8
92.5°	46.7	110.8	184.1	231.6	241.6
95°	75.1	134.7	208.8	254.6	268.0
97.5°	112.6	166.1	235.4	280.9	293.3
100°	151.0	200.3	267.2	309.2	324.8
102.5°	195.7	236.4	304.1	344.8	357.3
105°	240.6	274.9	342.0	379.6	393.8
107.5°	292.4	321.7	380.9	420.2	431.3
110°	340.1	366.3	422.2	461.3	469.9

TEST NUMBER: P1031283

CATALOG NUMBER: S123DIW-B1000D1030UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	391.2	411.0	462.1	500.8	513.0
115°	440.9	460.1	506.5	539.8	549.5
117.5°	493.0	504.8	548.4	580.7	588.5
120°	539.7	552.5	591.8	621.7	629.0
122.5°	589.7	596.5	636.2	662.7	669.0
125°	639.4	642.5	679.4	703.6	709.0
127.5°	686.4	691.2	722.8	743.5	748.9
130°	733.4	740.3	764.1	785.6	786.5
132.5°	779.1	787.2	805.4	824.5	828.8
135°	827.1	831.8	845.6	865.8	870.5
137.5°	871.0	874.7	887.3	903.7	907.3
140°	915.6	920.7	925.8	945.0	944.5
142.5°	957.5	961.3	963.3	979.8	981.4
145°	1001.4	1002.1	1005.2	1015.0	1016.2
147.5°	1037.9	1042.0	1045.0	1049.0	1048.3
150°	1077.7	1079.8	1081.8	1081.8	1078.4
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)