

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: P1032189

Luminaire Tested: S123RDIW-B340D1030UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032189
REPORT IS A COMBINATION OF REPORTS P994195 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B340D1030UB40-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

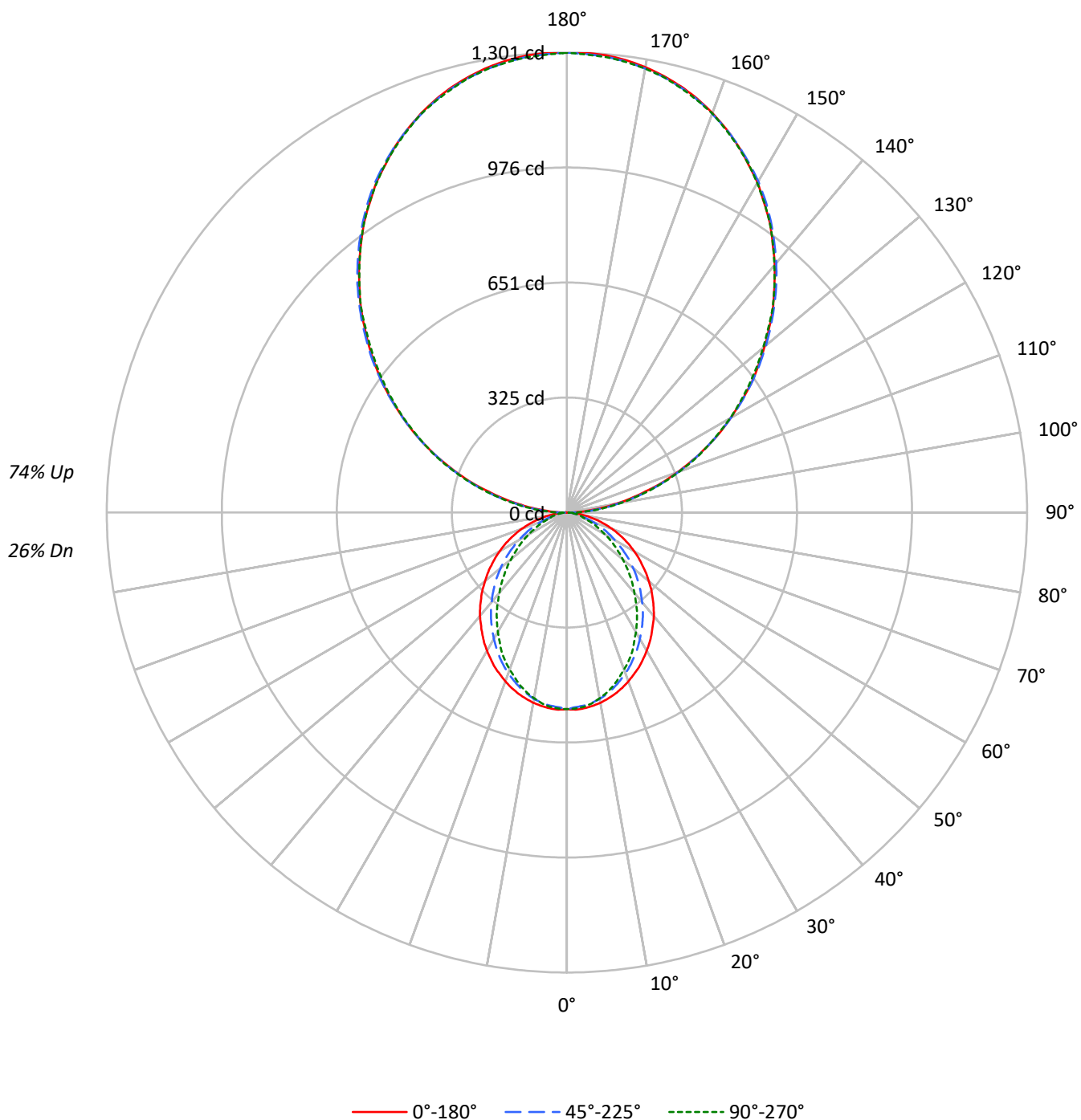
Lumens per Lamp: N/A
Luminaire Lumens: 4862.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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: P1032189

CATALOG NUMBER: S123RDIW-B340D1030UB40-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1032189

CATALOG NUMBER: S123RDIW-B340D1030UB40-4F0-XX-W2A-F1

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	0
RCR																		
0	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	93	88	85	81	82	79	76	73	61	59	58	45	44	43	30	30	29	22
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	27	26	25	19
3	77	68	61	56	68	61	55	50	48	44	40	35	33	31	24	22	21	16
4	70	60	53	47	63	54	48	43	42	38	34	31	29	26	21	20	18	14
5	65	54	46	40	57	48	42	37	38	33	30	28	25	23	19	17	16	12
6	59	48	40	35	53	43	36	32	34	29	26	26	22	20	18	16	14	11
7	55	43	36	30	49	39	32	28	31	26	23	23	20	18	16	14	13	10
8	51	39	32	27	45	35	29	24	28	23	20	21	18	16	15	13	11	9
9	47	36	28	24	42	32	26	22	26	21	18	19	16	14	14	12	10	8
10	44	32	26	21	39	29	23	19	23	19	16	18	15	13	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5985	5985	5985
5°	5994	5773	5756
10°	5947	5555	5446
15°	5870	5288	5106
20°	5769	4995	4725
25°	5664	4692	4364
30°	5529	4370	3938
35°	5392	4053	3550
40°	5263	3709	3121
45°	5095	3372	2736
50°	4913	3013	2337
55°	4722	2629	1971
60°	4540	2234	1600
65°	4305	1829	1249
70°	4011	1384	892
75°	3583	937	707
80°	3062	651	497
85°	2296	351	259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5095 cd/sqm

TEST NUMBER: P1032189

CATALOG NUMBER: S123RDIW-B340D1030UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	1.1
10°-20°	145.4	3.0
20°-30°	209.3	4.3
30°-40°	235.7	4.8
40°-50°	225.5	4.6
50°-60°	184.6	3.8
60°-70°	124.4	2.6
70°-80°	62.4	1.3
80°-90°	19.1	0.4
90°-100°	83.7	1.7
100°-110°	253.4	5.2
110°-120°	431.3	8.9
120°-130°	567.5	11.7
130°-140°	637.8	13.1
140°-150°	627.1	12.9
150°-160°	527.9	10.9
160°-170°	351.5	7.2
170°-180°	123.1	2.5
0°-30°	407.0	8.4
0°-40°	642.7	13.2
0°-60°	1052.8	21.7
0°-90°	1258.7	25.9
90°-120°	768.4	15.8
90°-150°	2600.8	53.5
90°-180°	3603.0	74.1
0°-180°	4862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	556	554	548	552	551	53
15°	530	525	513	510	507	149
25°	482	471	450	441	436	222
35°	418	401	373	354	346	261
45°	343	323	288	262	252	265
55°	261	238	200	174	165	234
65°	178	153	118	96	91	176
75°	94	73	48	43	42	100
85°	24	14	13	12	12	26
90°	1	11	24	29	31	6
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	

TEST NUMBER: P1032189

CATALOG NUMBER: S123RDIW-B340D1030UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	556.0	556.0	556.0	556.0	556.0
2.5°	558.2	556.4	551.0	556.0	555.1
5°	556.0	553.7	548.3	552.3	551.4
7.5°	551.9	549.6	542.9	545.6	544.2
10°	546.5	543.3	535.2	535.7	533.4
12.5°	538.8	535.2	524.8	524.4	521.7
15°	530.3	525.3	512.7	510.4	507.3
17.5°	519.9	514.5	498.7	494.2	489.7
20°	508.2	500.9	483.8	477.9	472.5
22.5°	495.1	486.5	468.0	460.4	455.4
25°	482.5	471.2	450.4	441.0	436.0
27.5°	467.1	455.0	432.4	419.8	412.1
30°	451.3	437.8	412.6	397.2	390.0
32.5°	435.6	419.8	392.7	375.6	367.9
35°	417.5	401.3	373.3	354.0	345.8
37.5°	399.5	381.9	352.6	331.0	321.0
40°	382.4	362.5	330.5	307.1	296.7
42.5°	363.0	343.1	309.8	283.6	274.6
45°	343.1	322.8	288.1	262.4	251.6
47.5°	323.7	301.2	266.9	239.0	229.5
50°	302.1	280.9	244.4	216.4	206.1
52.5°	282.7	259.3	223.2	193.9	184.9
55°	260.6	238.5	200.2	174.0	165.0
57.5°	240.8	216.9	178.1	153.3	145.6
60°	220.0	195.2	157.8	133.5	125.8
62.5°	199.3	174.5	137.1	114.5	106.4
65°	178.1	153.3	118.1	96.0	91.1
67.5°	156.9	131.7	97.4	80.7	75.3
70°	136.2	111.8	80.3	64.5	59.5
72.5°	115.4	91.5	63.6	51.4	50.0
75°	94.2	72.6	47.8	43.3	42.4
77.5°	74.8	55.0	37.4	34.7	33.8
80°	56.4	37.9	28.4	27.1	26.2
82.5°	38.8	23.4	20.3	18.9	18.9
85°	23.9	14.0	12.6	11.7	11.7
87.5°	10.8	5.9	5.9	5.4	5.0
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

TEST NUMBER: P1032189

CATALOG NUMBER: S123RDIW-B340D1030UB40-4F0-XX-W2A-F1

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)