Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P1032400

Luminaire Tested: S123RDIW-B775D1320UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1032400
	REPORT IS A COMBINATION OF REPORTS P994678 AND P1007351
Test Lab:	INNOVATION CENTER
Issue Date:	5/6/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	NEO-RAY
Catalog Number:	S123RDIW-B775D1320UB40-4F0-XX-W2A-F
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:	8167.0 lumens
Efficiency:	N/A
Efficacy:	104.7 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

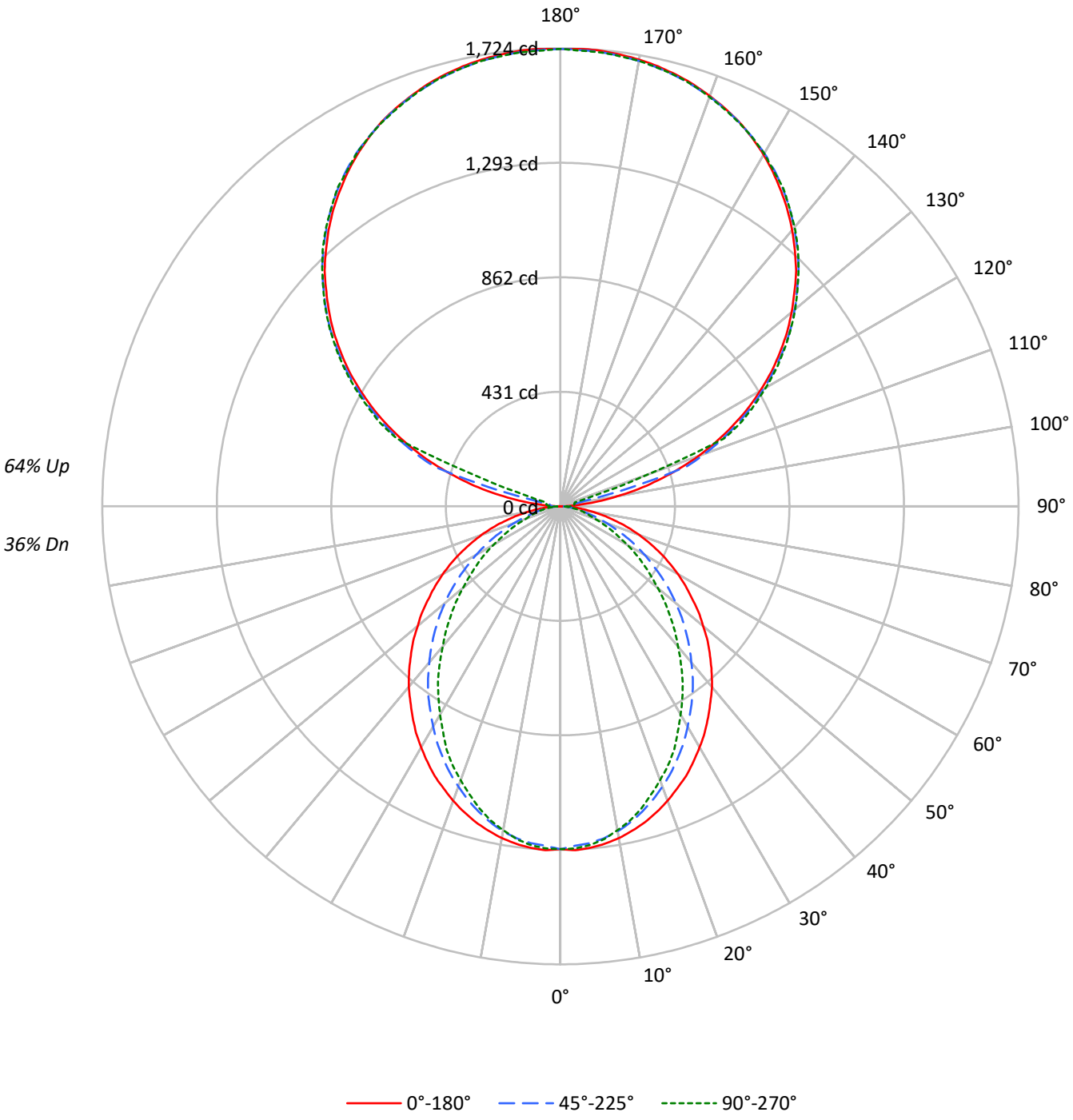
Input Watts (W):	78
Input Voltage (V):	
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1032400
CATALOG NUMBER: S123RDIW-B775D1320UB40-4F0-XX-W2A-F

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1032400
CATALOG NUMBER: S123RDIW-B775D1320UB40-4F0-XX-W2A-F

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43	36
1	95	91	87	84	86	82	79	76	66	64	62	52	50	49	38	38	37	31
2	87	79	74	69	78	72	67	63	58	55	52	46	43	41	34	33	31	26
3	79	70	63	57	71	64	58	53	52	47	44	41	38	35	30	28	27	22
4	72	62	54	49	65	56	50	45	46	41	37	36	33	30	27	25	23	19
5	66	55	47	42	60	50	44	39	41	36	32	33	29	26	25	22	20	17
6	61	50	42	36	55	45	38	33	37	32	28	29	26	23	22	20	18	15
7	57	45	37	32	51	41	34	29	34	29	25	27	23	20	20	18	16	13
8	52	40	33	28	47	37	31	26	31	26	22	25	21	18	19	16	14	12
9	49	37	30	25	44	34	27	23	28	23	20	23	19	16	17	15	13	11
10	45	34	27	22	41	31	25	21	26	21	18	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13889	13889	13889
5°	13911	13397	13361
10°	13802	12894	12640
15°	13622	12271	11849
20°	13388	11594	10966
25°	13145	10890	10129
30°	12834	10141	9140
35°	12514	9407	8239
40°	12213	8608	7244
45°	11827	7827	6349
50°	11401	6993	5423
55°	10960	6101	4574
60°	10538	5186	3713
65°	9993	4247	2898
70°	9306	3212	2071
75°	8319	2174	1642
80°	7101	1511	1151
85°	5331	816	603

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 11827 cd/sqm

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1032400
CATALOG NUMBER: S123RDIW-B775D1320UB40-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.3	1.5
10°-20°	337.4	4.1
20°-30°	485.8	5.9
30°-40°	547.1	6.7
40°-50°	523.3	6.4
50°-60°	428.4	5.2
60°-70°	288.8	3.5
70°-80°	144.9	1.8
80°-90°	41.3	0.5
90°-100°	60.7	0.7
100°-110°	293.5	3.6
110°-120°	719.3	8.8
120°-130°	913.1	11.2
130°-140°	975.5	11.9
140°-150°	912.2	11.2
150°-160°	735.8	9.0
160°-170°	474.8	5.8
170°-180°	163.6	2.0
0°-30°	944.5	11.6
0°-40°	1491.7	18.3
0°-60°	2443.4	29.9
0°-90°	2918.5	35.7
90°-120°	1073.6	13.1
90°-150°	3874.4	47.4
90°-180°	5249.0	64.3
0°-180°	8167.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1290	1290	1290	1290	1290	
5°	1290	1285	1272	1282	1280	122
15°	1231	1219	1190	1185	1177	347
25°	1120	1094	1045	1023	1012	515
35°	969	931	866	822	803	607
45°	796	749	669	609	584	615
55°	605	554	465	404	383	542
65°	413	356	274	223	211	409
75°	219	168	111	100	98	233
85°	56	32	29	27	27	61
90°	1	14	31	36	38	8
95°	78	26	40	49	49	93
105°	381	395	280	54	56	404
115°	715	723	734	747	752	706
125°	1008	1018	1023	1026	1028	901
135°	1255	1262	1268	1271	1268	966
145°	1448	1457	1459	1462	1462	906
155°	1595	1592	1594	1600	1592	735
165°	1682	1678	1677	1687	1678	475
175°	1722	1715	1716	1726	1715	164
180°	1722	1722	1722	1722	1722	

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1032400
CATALOG NUMBER: S123RDIW-B775D1320UB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1290.3	1290.3	1290.3	*1290.3*	1290.3
2.5°	1295.5	1291.3	1278.8	*1290.3*	1288.2
5°	1290.3	1285.1	1272.5	*1281.9*	1279.8
7.5°	1280.9	1275.6	1259.9	*1266.2*	1263.1
10°	1268.3	1261.0	1242.2	*1243.2*	1238.0
12.5°	1250.5	1242.2	1218.1	*1217.0*	1210.8
15°	1230.6	1219.1	1189.8	*1184.6*	1177.3
17.5°	1206.6	1194.0	1157.4	*1146.9*	1136.5
20°	1179.4	1162.6	1122.9	*1109.3*	1096.7
22.5°	1149.0	1129.1	1086.2	*1068.4*	1056.9
25°	1119.7	1093.6	1045.4	*1023.4*	1011.9
27.5°	1084.1	1055.9	1003.6	*974.3*	956.5
30°	1047.5	1016.1	957.5	*921.9*	905.2
32.5°	1010.9	974.3	911.5	*871.7*	853.9
35°	969.0	931.4	866.5	*821.5*	802.6
37.5°	927.2	886.4	818.3	*768.1*	745.1
40°	887.4	841.4	767.1	*712.6*	688.6
42.5°	842.4	796.4	718.9	*658.2*	637.3
45°	796.4	749.3	668.7	*609.0*	583.9
47.5°	751.4	699.0	619.5	*554.6*	532.7
50°	701.1	651.9	567.2	*502.3*	478.2
52.5°	656.1	601.7	518.0	*450.0*	429.1
55°	604.9	553.6	464.6	*403.9*	383.0
57.5°	558.8	503.4	413.4	*355.8*	338.0
60°	510.7	453.1	366.3	*309.8*	292.0
62.5°	462.5	405.0	318.1	*265.8*	247.0
65°	413.4	355.8	274.2	*222.9*	211.4
67.5°	364.2	305.6	226.0	*187.3*	174.8
70°	316.0	259.5	186.3	*149.6*	138.1
72.5°	267.9	212.4	147.6	*119.3*	116.2
75°	218.7	168.5	110.9	*100.5*	98.4
77.5°	173.7	127.7	86.9	*80.6*	78.5
80°	130.8	87.9	65.9	*62.8*	60.7
82.5°	90.0	54.4	47.1	*44.0*	44.0
85°	55.5	32.4	29.3	*27.2*	27.2
87.5°	25.1	13.6	13.6	*12.6*	11.5
90°	1.3	14.1	30.7	*35.8*	38.4
92.5°	29.4	21.7	33.3	*42.2*	43.5
95°	78.0	25.6	39.7	*48.6*	48.6
97.5°	142.0	106.2	40.9	*51.2*	52.4
100°	216.2	241.7	42.2	*52.4*	53.7
102.5°	300.6	317.2	94.7	*52.4*	55.0
105°	381.2	395.2	280.1	*53.7*	56.3
107.5°	466.9	478.4	497.6	*300.6*	133.0
110°	552.6	562.8	576.9	*534.7*	351.7

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1032400
CATALOG NUMBER: S123RDIW-B775D1320UB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	634.4	643.4	657.4	*669.0*	666.4
115°	715.0	722.7	734.2	*747.0*	752.1
117.5°	794.3	803.3	809.7	*819.9*	821.2
120°	867.2	878.7	882.6	*892.8*	892.8
122.5°	941.4	950.4	955.5	*961.9*	963.1
125°	1007.9	1018.1	1023.3	*1025.8*	1028.4
127.5°	1074.4	1084.7	1091.1	*1094.9*	1092.3
130°	1135.8	1146.1	1151.2	*1156.3*	1153.7
132.5°	1194.7	1204.9	1208.7	*1213.8*	1210.0
135°	1254.8	1262.4	1267.6	*1271.4*	1267.6
137.5°	1305.9	1316.2	1318.7	*1325.1*	1322.6
140°	1357.1	1364.8	1368.6	*1373.7*	1371.2
142.5°	1404.4	1412.1	1415.9	*1419.8*	1415.9
145°	1447.9	1456.9	1459.4	*1462.0*	1462.0
147.5°	1490.1	1496.5	1499.1	*1501.6*	1495.2
150°	1528.5	1532.3	1534.9	*1537.5*	1533.6
152.5°	1563.0	1564.3	1565.6	*1570.7*	1564.3
155°	1595.0	1592.5	1593.7	*1600.1*	1592.5
157.5°	1620.6	1620.6	1619.3	*1627.0*	1616.8
160°	1643.6	1642.3	1641.1	*1648.7*	1639.8
162.5°	1665.4	1661.5	1660.2	*1669.2*	1661.5
165°	1682.0	1678.2	1676.9	*1687.1*	1678.2
167.5°	1696.1	1690.9	1690.9	*1701.2*	1690.9
170°	1707.6	1702.5	1702.5	*1712.7*	1702.5
172.5°	1715.2	1708.8	1710.1	*1720.4*	1708.8
175°	1721.6	1715.2	1716.5	*1725.5*	1715.2
177.5°	*1724.2*	*1717.8*	*1719.1*	*1729.3*	*1716.5*
180°	1721.6	1721.6	1721.6	*1721.6*	1721.6

(END OF REPORT)