

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: P1031023

Luminaire Tested: S123RDIW-B1000D1030UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031023
REPORT IS A COMBINATION OF REPORTS P993738 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1000D1030UB2750-4F0-XX-W2A-F_5000K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

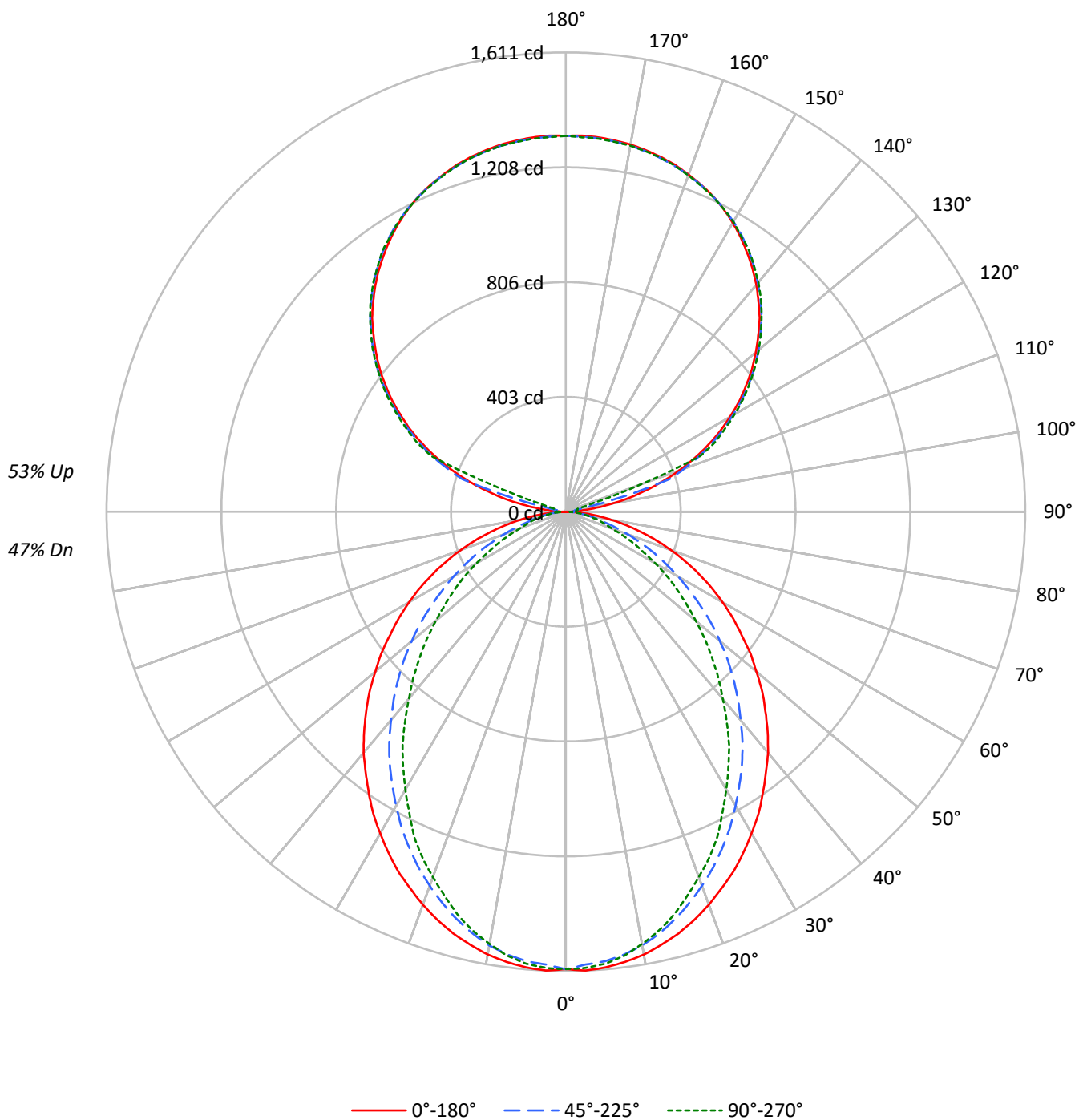
Lumens per Lamp: N/A
Luminaire Lumens: 7646.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1031023

CATALOG NUMBER: S123RDIW-B1000D1030UB2750-4F0-XX-W2A-F_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P1031023

CATALOG NUMBER: S123RDIW-B1000D1030UB2750-4F0-XX-W2A-F_5000K

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	107	107	107	107	98	98	98	98	82	82	82		67	67	67		54
1	98	93	90	86	90	86	83	80	72	70	68		60	58	57		48
2	89	82	76	71	82	76	70	66	64	60	57		53	50	48		43
3	81	72	65	59	75	67	61	56	56	52	48		47	44	41		38
4	75	64	56	50	68	59	53	47	50	45	41		42	38	35		34
5	69	57	49	43	63	53	46	41	45	40	36		38	34	31		31
6	63	51	43	38	58	48	41	36	41	35	31		34	30	27		28
7	58	46	39	33	54	43	36	31	37	32	28		31	27	24		26
8	54	42	35	29	50	39	32	28	34	28	25		29	24	21		24
9	51	39	31	26	47	36	29	25	31	26	22		26	22	19		22
10	47	35	28	24	44	33	27	22	29	23	20		24	20	17		20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17266	17266	17266
5°	17295	16656	16611
10°	17159	16030	15714
15°	16936	15255	14731
20°	16643	14414	13633
25°	16343	13539	12593
30°	15956	12608	11363
35°	15558	11694	10244
40°	15183	10701	9006
45°	14704	9730	7894
50°	14175	8694	6743
55°	13626	7584	5687
60°	13101	6446	4616
65°	12423	5280	3603
70°	11570	3992	2574
75°	10343	2703	2040
80°	8827	1880	1432
85°	6628	1014	749

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14704 cd/sqm

TEST NUMBER: P1031023

CATALOG NUMBER: S123RDIW-B1000D1030UB2750-4F0-XX-W2A-F_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.8	2.0
10°-20°	419.5	5.5
20°-30°	604.0	7.9
30°-40°	680.2	8.9
40°-50°	650.6	8.5
50°-60°	532.6	7.0
60°-70°	359.1	4.7
70°-80°	180.1	2.4
80°-90°	49.7	0.7
90°-100°	46.5	0.6
100°-110°	224.8	2.9
110°-120°	550.8	7.2
120°-130°	699.3	9.1
130°-140°	747.0	9.8
140°-150°	698.6	9.1
150°-160°	563.5	7.4
160°-170°	363.6	4.8
170°-180°	125.3	1.6
0°-30°	1174.3	15.4
0°-40°	1854.5	24.3
0°-60°	3037.7	39.7
0°-90°	3626.6	47.4
90°-120°	822.1	10.8
90°-150°	2967.0	38.8
90°-180°	4019.0	52.6
0°-180°	7646.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1604	1604	1604	1604	1604	
5°	1604	1598	1582	1594	1591	152
15°	1530	1516	1479	1473	1464	431
25°	1392	1360	1300	1272	1258	640
35°	1205	1158	1077	1021	998	754
45°	990	932	831	757	726	764
55°	752	688	578	502	476	674
65°	514	442	341	277	263	509
75°	272	210	138	125	122	290
85°	69	40	36	34	34	76
90°	1	11	24	27	29	8
95°	60	20	30	37	37	71
105°	292	303	214	41	43	309
115°	548	553	562	572	576	541
125°	772	780	784	786	788	690
135°	961	967	971	974	971	740
145°	1109	1116	1118	1120	1120	694
155°	1222	1220	1220	1225	1220	563
165°	1288	1285	1284	1292	1285	364
175°	1318	1314	1314	1321	1314	125
180°	1318	1318	1318	1318	1318	

TEST NUMBER: P1031023

CATALOG NUMBER: S123RDIW-B1000D1030UB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1604.1	1604.1	1604.1	1604.1	1604.1
2.5°	1610.6	1605.4	1589.8	1604.1	1601.5
5°	1604.1	1597.6	1582.0	1593.7	1591.1
7.5°	1592.4	1585.9	1566.4	1574.2	1570.3
10°	1576.8	1567.7	1544.3	1545.6	1539.1
12.5°	1554.7	1544.3	1514.4	1513.1	1505.2
15°	1530.0	1515.7	1479.2	1472.7	1463.6
17.5°	1500.0	1484.4	1438.9	1425.9	1412.9
20°	1466.2	1445.4	1396.0	1379.1	1363.4
22.5°	1428.5	1403.8	1350.4	1328.3	1314.0
25°	1392.1	1359.5	1299.7	1272.4	1258.1
27.5°	1347.8	1312.7	1247.7	1211.2	1189.1
30°	1302.3	1263.3	1190.4	1146.2	1125.4
32.5°	1256.8	1211.2	1133.2	1083.7	1061.6
35°	1204.7	1157.9	1077.2	1021.3	997.9
37.5°	1152.7	1101.9	1017.4	954.9	926.3
40°	1103.2	1046.0	953.6	886.0	856.1
42.5°	1047.3	990.1	893.8	818.3	792.3
45°	990.1	931.5	831.3	757.2	726.0
47.5°	934.1	869.1	770.2	689.5	662.2
50°	871.7	810.5	705.1	624.5	594.6
52.5°	815.7	748.1	644.0	559.4	533.4
55°	752.0	688.2	577.6	502.2	476.2
57.5°	694.7	625.8	513.9	442.3	420.2
60°	634.9	563.3	455.3	385.1	363.0
62.5°	575.0	503.5	395.5	330.5	307.0
65°	513.9	442.3	340.9	277.1	262.8
67.5°	452.7	379.9	281.0	232.9	217.3
70°	392.9	322.6	231.6	186.0	171.7
72.5°	333.1	264.1	183.4	148.3	144.4
75°	271.9	209.5	137.9	124.9	122.3
77.5°	216.0	158.7	108.0	100.2	97.6
80°	162.6	109.3	82.0	78.1	75.5
82.5°	111.9	67.7	58.5	54.6	54.6
85°	69.0	40.3	36.4	33.8	33.8
87.5°	31.2	16.9	16.9	15.6	14.3
90°	1.0	10.8	23.5	27.4	29.4
92.5°	22.5	16.7	25.5	32.3	33.3
95°	59.8	19.6	30.4	37.2	37.2
97.5°	108.7	81.3	31.3	39.2	40.2
100°	165.5	185.1	32.3	40.2	41.1
102.5°	230.2	242.9	72.5	40.2	42.1
105°	291.9	302.7	214.5	41.1	43.1
107.5°	357.5	366.3	381.0	230.2	101.9
110°	423.2	431.0	441.8	409.4	269.4



TEST NUMBER: P1031023

CATALOG NUMBER: S123RDIW-B1000D1030UB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	485.8	492.7	503.5	512.3	510.3
115°	547.6	553.4	562.2	572.0	576.0
117.5°	608.3	615.1	620.0	627.9	628.9
120°	664.1	672.9	675.9	683.7	683.7
122.5°	720.9	727.8	731.7	736.6	737.6
125°	771.9	779.7	783.6	785.6	787.5
127.5°	822.8	830.6	835.5	838.5	836.5
130°	869.8	877.7	881.6	885.5	883.5
132.5°	914.9	922.7	925.6	929.6	926.6
135°	960.9	966.8	970.7	973.6	970.7
137.5°	1000.1	1007.9	1009.9	1014.8	1012.8
140°	1039.3	1045.2	1048.1	1052.0	1050.0
142.5°	1075.5	1081.4	1084.3	1087.3	1084.3
145°	1108.8	1115.7	1117.6	1119.6	1119.6
147.5°	1141.1	1146.0	1148.0	1150.0	1145.1
150°	1170.5	1173.5	1175.4	1177.4	1174.4
152.5°	1197.0	1198.0	1198.9	1202.9	1198.0
155°	1221.5	1219.5	1220.5	1225.4	1219.5
157.5°	1241.1	1241.1	1240.1	1246.0	1238.1
160°	1258.7	1257.7	1256.7	1262.6	1255.7
162.5°	1275.3	1272.4	1271.4	1278.3	1272.4
165°	1288.1	1285.1	1284.2	1292.0	1285.1
167.5°	1298.8	1294.9	1294.9	1302.8	1294.9
170°	1307.7	1303.7	1303.7	1311.6	1303.7
172.5°	1313.5	1308.6	1309.6	1317.5	1308.6
175°	1318.4	1313.5	1314.5	1321.4	1313.5
177.5°	1320.4	1315.5	1316.5	1324.3	1314.5
180°	1318.4	1318.4	1318.4	1318.4	1318.4

(END OF REPORT)