

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: P1037498

Luminaire Tested: S123RDS-B1000DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDS-B1000DB50-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Surface with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

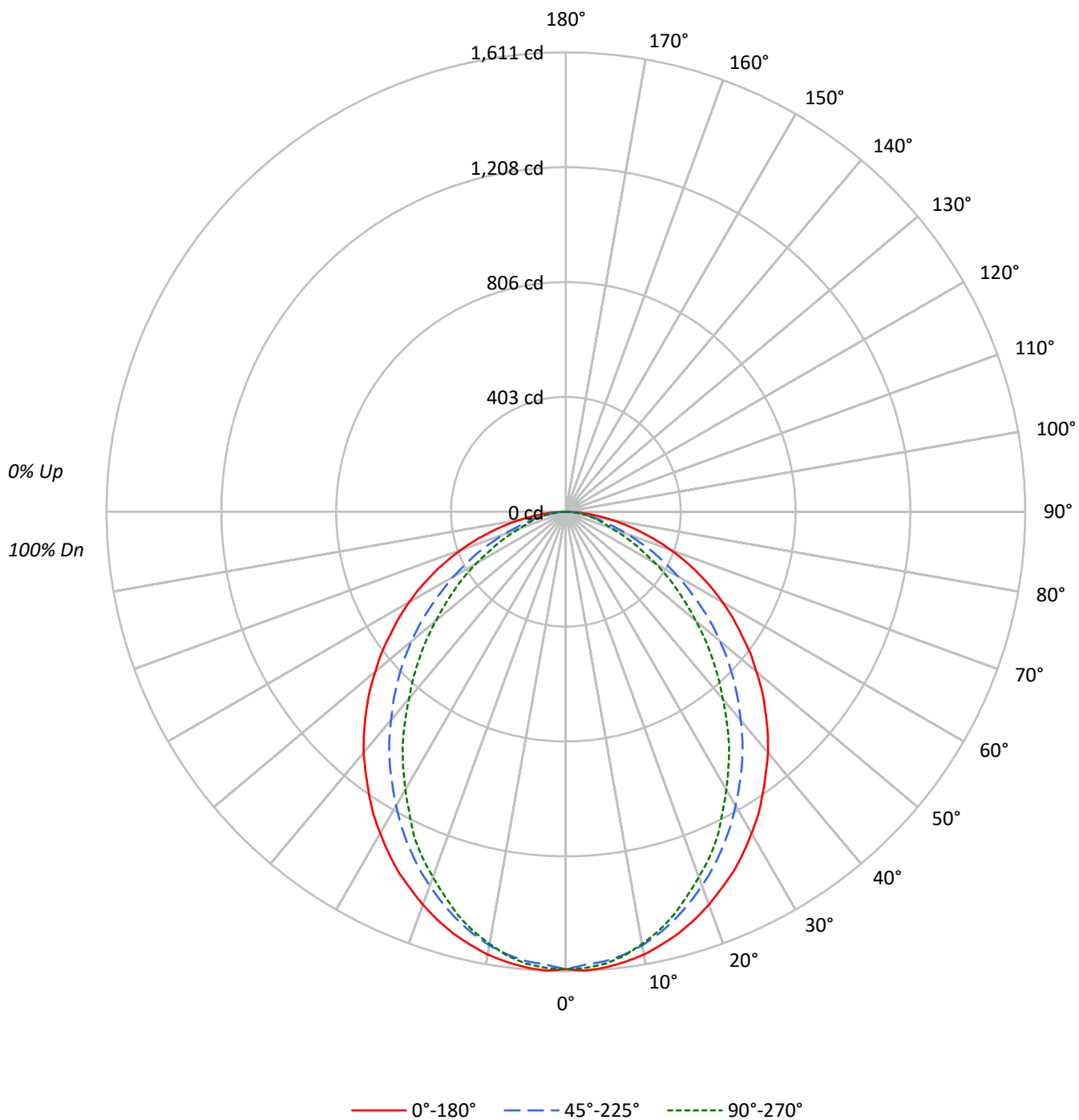
Lumens per Lamp: N/A
Luminaire Lumens: 3624.0 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	93	90		91
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	92	82	75	68	90	81	74	68	78	72	67		75	70	66		73
4	85	73	65	59	83	72	64	58	70	63	58		67	62	57		65
5	78	66	57	51	76	65	57	51	63	56	50		61	55	50		59
6	73	60	51	45	71	59	51	45	57	50	45		55	49	44		54
7	67	54	46	40	66	54	46	40	52	45	40		51	44	39		49
8	63	50	42	36	61	49	41	36	48	41	36		47	40	36		46
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		42
10	55	43	35	30	54	42	35	30	41	34	30		40	34	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17266	17266	17266
5°	17332	17094	17192
10°	17234	16879	16822
15°	17050	16484	16310
20°	16795	15991	15617
25°	16534	15436	14942
30°	16186	14796	13988
35°	15830	14155	13113
40°	15501	13399	12029
45°	15072	12654	11052
50°	14597	11807	9957
55°	14112	10839	8937
60°	13668	9802	7815
65°	13089	8683	6693
70°	12365	7289	5404
75°	11308	5735	5086
80°	10079	5083	4680
85°	8522	4495	4174

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15072 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.8	4.2
10°-20°	419.5	11.6
20°-30°	604.0	16.7
30°-40°	680.2	18.8
40°-50°	650.6	18.0
50°-60°	532.6	14.7
60°-70°	359.1	9.9
70°-80°	180.1	5.0
80°-90°	47.1	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1174.3	32.4
0°-40°	1854.5	51.2
0°-60°	3037.7	83.8
0°-90°	3624.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3624.0	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	80
90°	0	0	0	0	0	

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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°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)