

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: P994920

Luminaire Tested: S123RDR-B1000DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994920
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: S123RDR-B1000DB27-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

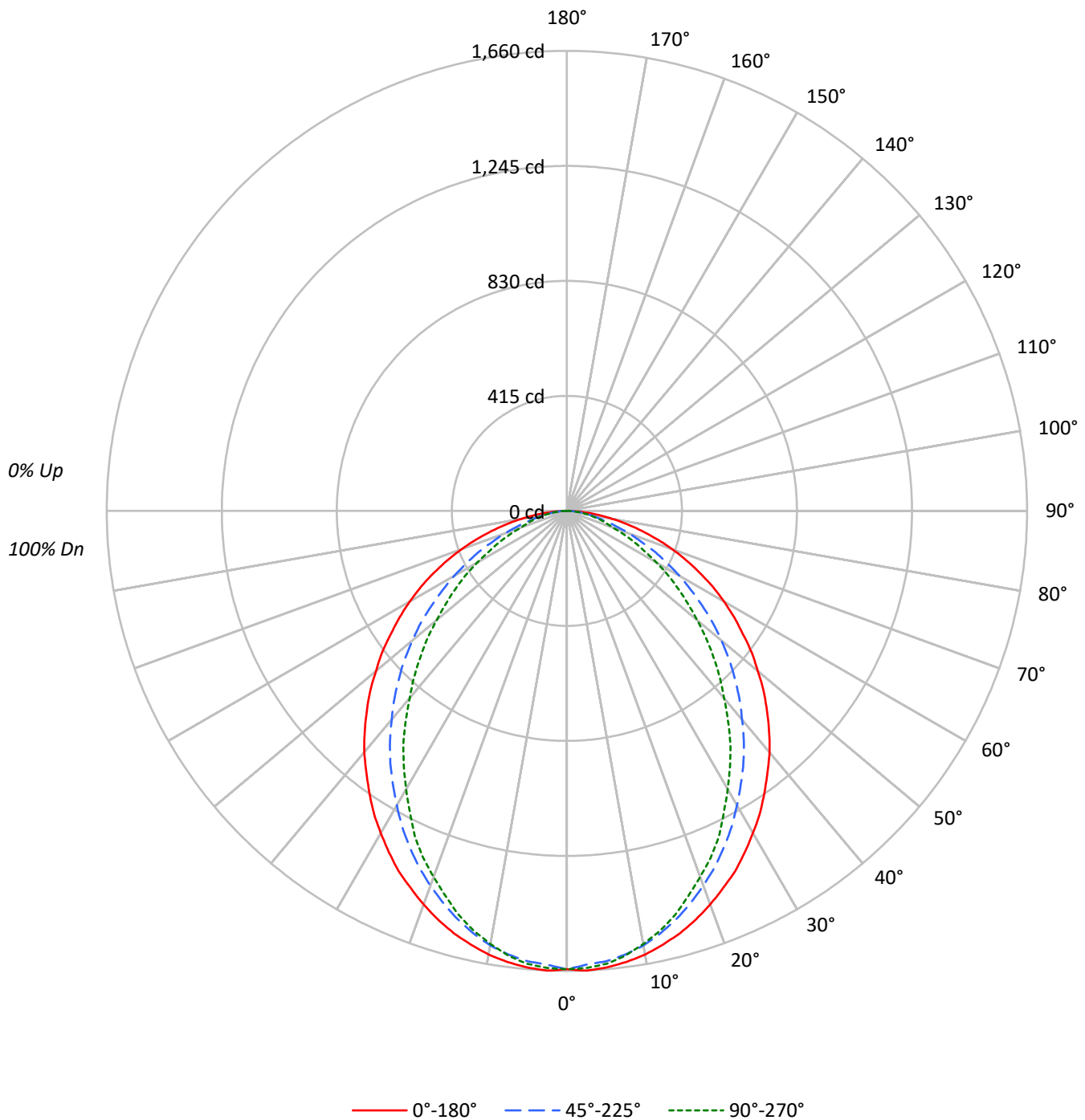
Lumens per Lamp: N/A
Luminaire Lumens: 3736.0 lumens
Efficiency: N/A
Efficacy: 79.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P994920

CATALOG NUMBER: S123RDR-B1000DB27-4F0-XX-W2A-F

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°	17800	17800	17800
5°	17868	17622	17723
10°	17767	17401	17341
15°	17577	16993	16814
20°	17314	16484	16101
25°	17044	15914	15403
30°	16686	15253	14419
35°	16320	14592	13517
40°	15981	13814	12400
45°	15538	13046	11393
50°	15048	12172	10263
55°	14548	11175	9212
60°	14090	10105	8056
65°	13494	8950	6900
70°	12746	7512	5570
75°	11657	5914	5244
80°	10389	5238	4823
85°	8781	4644	4310

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15538 cd/sqm

TEST NUMBER: P994920

CATALOG NUMBER: S123RDR-B1000DB27-4FO-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.5	4.2
10°-20°	432.5	11.6
20°-30°	622.7	16.7
30°-40°	701.2	18.8
40°-50°	670.7	18.0
50°-60°	549.1	14.7
60°-70°	370.2	9.9
70°-80°	185.7	5.0
80°-90°	48.6	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°	1210.6	32.4
0°-40°	1911.8	51.2
0°-60°	3131.6	83.8
0°-90°	3736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3736.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1654	1654	1654	1654	1654	
5°	1654	1647	1631	1643	1640	157
15°	1577	1562	1525	1518	1509	444
25°	1435	1402	1340	1312	1297	660
35°	1242	1194	1110	1053	1029	777
45°	1021	960	857	781	748	788
55°	775	710	596	518	491	695
65°	530	456	351	286	271	524
75°	280	216	142	129	126	299
85°	71	42	38	35	35	82
90°	0	0	0	0	0	

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CATALOG NUMBER: S123RDR-B1000DB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1653.7	1653.7	1653.7	1653.7	1653.7
2.5°	1660.4	1655.0	1638.9	1653.7	1651.0
5°	1653.7	1647.0	1630.9	1643.0	1640.3
7.5°	1641.6	1634.9	1614.8	1622.9	1618.8
10°	1625.5	1616.1	1592.0	1593.3	1586.6
12.5°	1602.7	1592.0	1561.2	1559.8	1551.8
15°	1577.3	1562.5	1524.9	1518.2	1508.8
17.5°	1546.4	1530.3	1483.4	1470.0	1456.5
20°	1511.5	1490.1	1439.1	1421.7	1405.6
22.5°	1472.6	1447.2	1392.2	1369.4	1354.6
25°	1435.1	1401.6	1339.9	1311.7	1296.9
27.5°	1389.5	1353.3	1286.2	1248.7	1225.9
30°	1342.5	1302.3	1227.2	1181.6	1160.1
32.5°	1295.6	1248.7	1168.2	1117.2	1094.4
35°	1242.0	1193.7	1110.5	1052.8	1028.7
37.5°	1188.3	1136.0	1048.8	984.4	954.9
40°	1137.3	1078.3	983.1	913.4	882.5
42.5°	1079.7	1020.7	921.4	843.6	816.8
45°	1020.7	960.3	857.0	780.6	748.4
47.5°	963.0	895.9	794.0	710.8	682.7
50°	898.6	835.6	726.9	643.8	612.9
52.5°	840.9	771.2	663.9	576.7	549.9
55°	775.2	709.5	595.5	517.7	490.9
57.5°	716.2	645.1	529.8	456.0	433.2
60°	654.5	580.7	469.4	397.0	374.2
62.5°	592.8	519.0	407.7	340.7	316.5
65°	529.8	456.0	351.4	285.7	270.9
67.5°	466.7	391.6	289.7	240.1	224.0
70°	405.0	332.6	238.7	191.8	177.0
72.5°	343.3	272.3	189.1	152.9	148.9
75°	280.3	215.9	142.2	128.8	126.1
77.5°	222.6	163.6	111.3	103.3	100.6
80°	167.6	112.7	84.5	80.5	77.8
82.5°	115.3	69.7	60.4	56.3	56.3
85°	71.1	41.6	37.6	34.9	34.9
87.5°	32.2	17.4	17.4	16.1	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)