

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: P1007120

Luminaire Tested: S125RDR-B1090DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007120
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-B1090DB27-4F0-XX-W2A-F
Description: Define 5 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

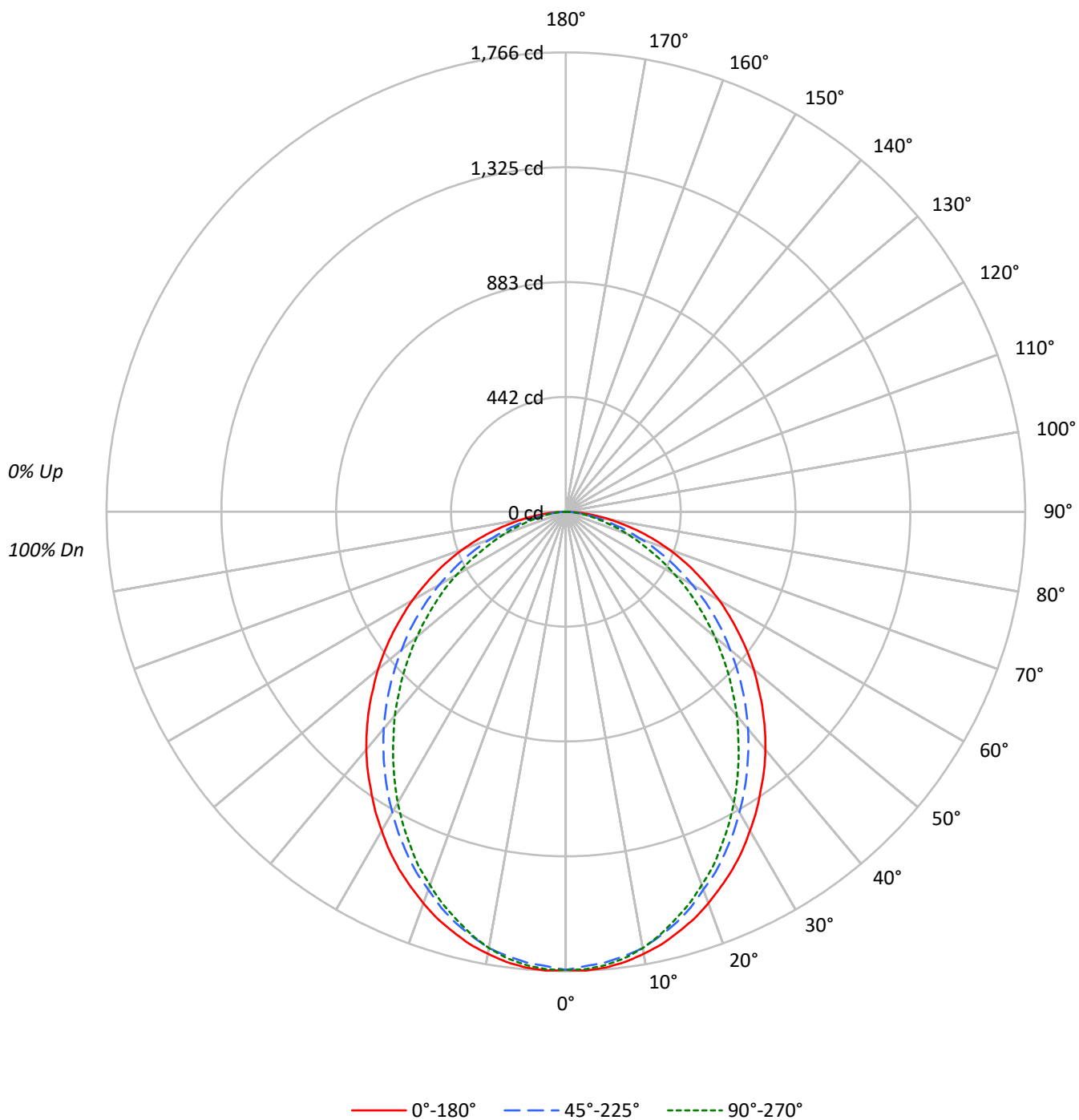
Lumens per Lamp: N/A
Luminaire Lumens: 4162.0 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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: P1007120

CATALOG NUMBER: S125RDR-B1090DB27-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1007120

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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	109	105	101	97	107	103	99	96	99	96	93		95	92	90		91
2	100	92	86	80	98	90	84	79	87	82	78		84	79	76		81
3	92	82	74	68	89	80	73	67	77	71	66		74	69	65		72
4	84	73	64	58	82	71	64	57	69	62	57		67	61	56		64
5	78	65	57	50	76	64	56	50	62	55	49		60	54	49		58
6	72	59	50	44	70	58	50	44	56	49	44		55	48	43		53
7	67	54	45	39	65	53	45	39	51	44	39		50	43	39		49
8	62	49	41	35	61	48	41	35	47	40	35		46	39	35		45
9	58	45	37	32	57	45	37	32	44	37	32		42	36	31		41
10	55	42	34	29	54	41	34	29	40	34	29		39	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11287	11287	11287
5°	11312	11184	11253
10°	11227	11080	11080
15°	11093	10855	10767
20°	10922	10541	10414
25°	10723	10234	10008
30°	10474	9873	9558
35°	10220	9501	9054
40°	9982	9114	8558
45°	9693	8680	8017
50°	9402	8209	7453
55°	9066	7758	6852
60°	8729	7212	6206
65°	8331	6575	5467
70°	7875	5783	4711
75°	7246	4874	3919
80°	6383	3830	3288
85°	5381	3132	2933

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9693 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.8	4.0
10°-20°	463.3	11.1
20°-30°	671.8	16.1
30°-40°	765.4	18.4
40°-50°	746.0	17.9
50°-60°	627.8	15.1
60°-70°	440.0	10.6
70°-80°	225.6	5.4
80°-90°	56.3	1.4
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°	1300.9	31.3
0°-40°	2066.3	49.6
0°-60°	3440.2	82.7
0°-90°	4162.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4162.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1762	1762	1762	1762	1762	
5°	1759	1754	1739	1752	1750	167
15°	1672	1664	1636	1635	1623	472
25°	1517	1497	1448	1430	1416	698
35°	1307	1275	1215	1176	1158	818
45°	1070	1031	958	905	885	825
55°	812	769	694	635	613	726
65°	550	504	434	380	361	544
75°	293	253	197	168	158	309
85°	73	49	43	41	40	84
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1761.6	1761.6	1761.6	1761.6	1761.6
2.5°	1765.6	1761.6	1748.3	1761.6	1760.3
5°	1758.9	1753.6	1739.0	1752.3	1749.6
7.5°	1745.6	1740.3	1723.0	1733.6	1731.0
10°	1725.7	1721.7	1703.0	1707.0	1703.0
12.5°	1703.0	1697.7	1671.1	1673.8	1667.1
15°	1672.4	1664.5	1636.5	1635.2	1623.2
17.5°	1640.5	1628.5	1595.3	1588.6	1579.3
20°	1601.9	1588.6	1546.0	1539.4	1527.4
22.5°	1559.3	1546.0	1500.8	1486.2	1476.9
25°	1516.8	1496.8	1447.6	1430.3	1415.7
27.5°	1468.9	1444.9	1393.0	1370.4	1355.8
30°	1415.7	1390.4	1334.5	1303.9	1291.9
32.5°	1363.8	1333.2	1276.0	1241.4	1225.4
35°	1306.6	1274.6	1214.7	1176.2	1157.5
37.5°	1252.0	1213.4	1152.2	1107.0	1088.4
40°	1193.5	1153.5	1089.7	1039.1	1023.2
42.5°	1132.3	1091.0	1024.5	976.6	951.3
45°	1069.7	1031.1	958.0	904.7	884.8
47.5°	1004.5	964.6	891.4	836.9	814.3
50°	943.3	899.4	823.6	767.7	747.7
52.5°	876.8	831.6	761.0	699.8	679.9
55°	811.6	769.0	694.5	634.6	613.4
57.5°	745.1	699.8	628.0	569.5	550.8
60°	681.2	634.6	562.8	504.3	484.3
62.5°	613.4	569.5	496.3	443.1	423.1
65°	549.5	504.3	433.7	380.5	360.6
67.5°	485.6	440.4	372.5	322.0	306.0
70°	420.4	375.2	308.7	267.4	251.5
72.5°	356.6	312.7	251.5	214.2	204.9
75°	292.7	252.8	196.9	167.6	158.3
77.5°	227.5	195.6	149.0	126.4	118.4
80°	173.0	141.0	103.8	91.8	89.1
82.5°	119.7	91.8	69.2	65.2	63.9
85°	73.2	49.2	42.6	41.2	39.9
87.5°	30.6	21.3	20.0	20.0	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)