

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: P1007128

Luminaire Tested: S125RDR-B1090DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007128
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-B1090DB2750-4F0-XX-W2A-F_3500K
Description: Define 5 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

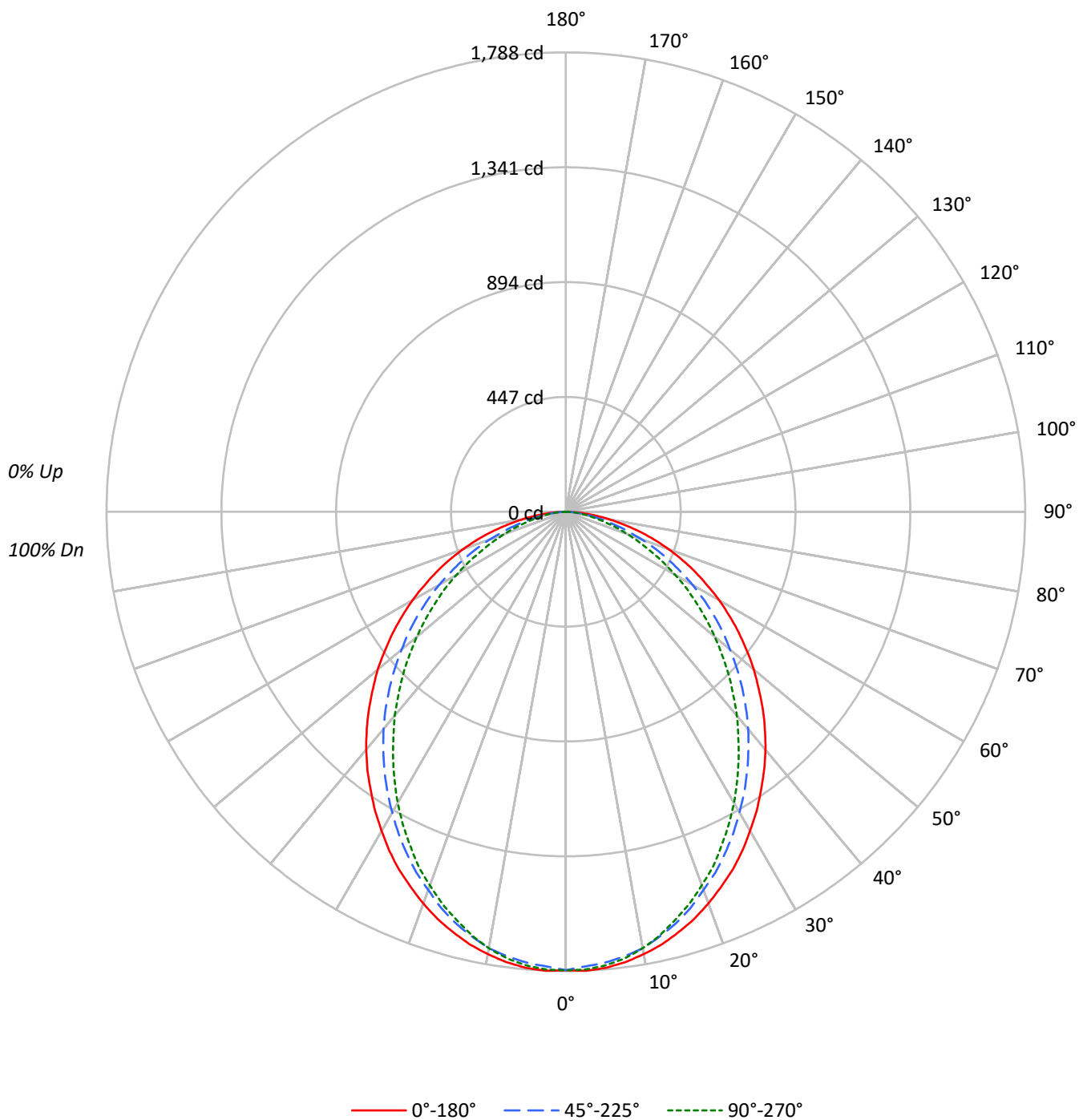
Lumens per Lamp: N/A
Luminaire Lumens: 4216.0 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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: P1007128

CATALOG NUMBER: S125RDR-B1090DB2750-4F0-XX-W2A-F_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1007128

CATALOG NUMBER: S125RDR-B1090DB2750-4F0-XX-W2A-F_3500K

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°	11433	11433	11433
5°	11459	11329	11399
10°	11373	11223	11223
15°	11237	10996	10907
20°	11064	10678	10549
25°	10862	10367	10138
30°	10609	10001	9682
35°	10352	9624	9172
40°	10111	9232	8668
45°	9818	8793	8121
50°	9525	8316	7550
55°	9183	7858	6940
60°	8843	7305	6287
65°	8438	6662	5537
70°	7978	5858	4771
75°	7340	4939	3971
80°	6464	3878	3332
85°	5447	3168	2970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9818 cd/sqm

TEST NUMBER: P1007128

CATALOG NUMBER: S125RDR-B1090DB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.9	4.0
10°-20°	469.3	11.1
20°-30°	680.5	16.1
30°-40°	775.3	18.4
40°-50°	755.7	17.9
50°-60°	636.0	15.1
60°-70°	445.7	10.6
70°-80°	228.5	5.4
80°-90°	57.0	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°	1317.8	31.3
0°-40°	2093.2	49.6
0°-60°	3484.9	82.7
0°-90°	4216.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4216.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1784	1784	1784	1784	1784	
5°	1782	1776	1762	1775	1772	169
15°	1694	1686	1658	1656	1644	478
25°	1536	1516	1466	1449	1434	707
35°	1324	1291	1230	1191	1173	829
45°	1084	1044	970	916	896	836
55°	822	779	704	643	621	735
65°	557	511	439	386	365	551
75°	296	256	200	170	160	313
85°	74	50	43	42	40	85
90°	0	0	0	0	0	

TEST NUMBER: P1007128

CATALOG NUMBER: S125RDR-B1090DB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.4	1784.4	1784.4	1784.4	1784.4
2.5°	1788.5	1784.4	1771.0	1784.4	1783.1
5°	1781.7	1776.4	1761.5	1775.0	1772.3
7.5°	1768.3	1762.9	1745.4	1756.1	1753.4
10°	1748.1	1744.0	1725.1	1729.2	1725.1
12.5°	1725.1	1719.7	1692.8	1695.5	1688.8
15°	1694.1	1686.1	1657.8	1656.4	1644.3
17.5°	1661.8	1649.7	1616.0	1609.2	1599.8
20°	1622.7	1609.2	1566.1	1559.4	1547.2
22.5°	1579.6	1566.1	1520.3	1505.5	1496.0
25°	1536.5	1516.2	1466.4	1448.8	1434.0
27.5°	1487.9	1463.7	1411.1	1388.2	1373.4
30°	1434.0	1408.4	1351.8	1320.8	1308.7
32.5°	1381.5	1350.5	1292.5	1257.5	1241.3
35°	1323.5	1291.2	1230.5	1191.4	1172.6
37.5°	1268.2	1229.2	1167.2	1121.3	1102.5
40°	1208.9	1168.5	1103.8	1052.6	1036.4
42.5°	1146.9	1105.2	1037.8	989.3	963.7
45°	1083.6	1044.5	970.4	916.5	896.3
47.5°	1017.6	977.1	903.0	847.7	824.8
50°	955.6	911.1	834.3	777.7	757.4
52.5°	888.2	842.4	770.9	708.9	688.7
55°	822.1	779.0	703.5	642.9	621.3
57.5°	754.7	708.9	636.1	576.8	558.0
60°	690.1	642.9	570.1	510.8	490.6
62.5°	621.3	576.8	502.7	448.8	428.6
65°	556.6	510.8	439.4	385.5	365.2
67.5°	491.9	446.1	377.4	326.2	310.0
70°	425.9	380.1	312.7	270.9	254.7
72.5°	361.2	316.7	254.7	217.0	207.6
75°	296.5	256.1	199.5	169.8	160.4
77.5°	230.5	198.1	150.9	128.0	120.0
80°	175.2	142.9	105.1	93.0	90.3
82.5°	121.3	93.0	70.1	66.0	64.7
85°	74.1	49.9	43.1	41.8	40.4
87.5°	31.0	21.6	20.2	20.2	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)