

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: P1007136

Luminaire Tested: S125RDR-B1090DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007136
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-B1090DB40-4F0-XX-W2A-F
Description: Define 5 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

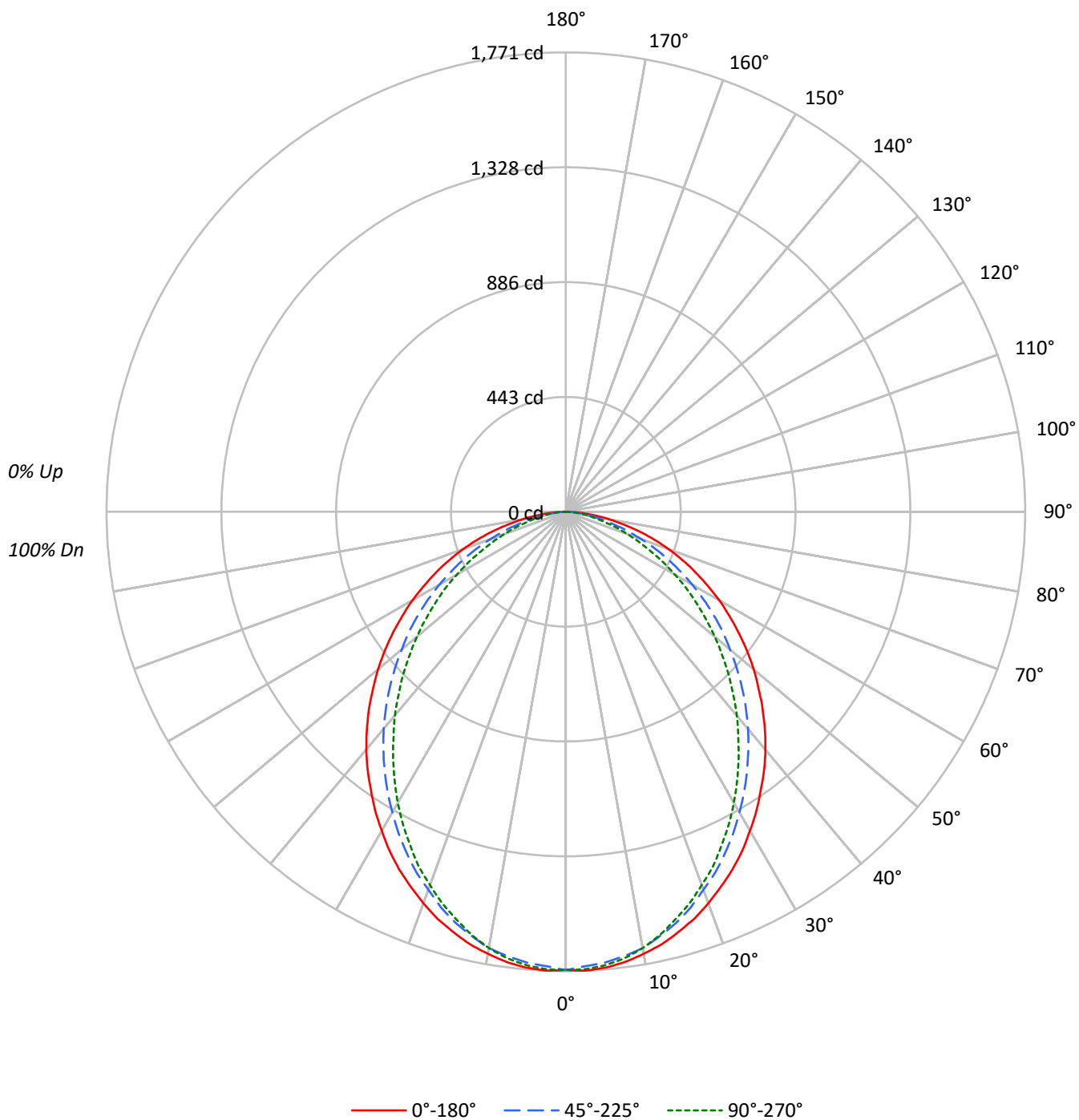
Lumens per Lamp: N/A
Luminaire Lumens: 4174.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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CATALOG NUMBER: S125RDR-B1090DB40-4FO-XX-W2A-F

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°	11319	11319	11319
5°	11345	11217	11285
10°	11259	11112	11112
15°	11126	10886	10798
20°	10954	10572	10444
25°	10753	10263	10036
30°	10503	9901	9585
35°	10249	9529	9080
40°	10011	9140	8582
45°	9721	8705	8040
50°	9429	8233	7475
55°	9092	7780	6871
60°	8755	7232	6224
65°	8355	6595	5482
70°	7900	5800	4724
75°	7268	4889	3931
80°	6402	3841	3299
85°	5396	3139	2941

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9721 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	4.0
10°-20°	464.7	11.1
20°-30°	673.8	16.1
30°-40°	767.6	18.4
40°-50°	748.2	17.9
50°-60°	629.6	15.1
60°-70°	441.2	10.6
70°-80°	226.2	5.4
80°-90°	56.4	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°	1304.7	31.3
0°-40°	2072.3	49.6
0°-60°	3450.1	82.7
0°-90°	4174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4174.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1767	1767	1767	1767	1767	
5°	1764	1759	1744	1757	1755	167
15°	1677	1669	1641	1640	1628	473
25°	1521	1501	1452	1434	1420	700
35°	1310	1278	1218	1180	1161	821
45°	1073	1034	961	907	887	827
55°	814	771	696	636	615	728
65°	551	506	435	382	362	546
75°	294	254	198	168	159	310
85°	73	49	43	41	40	85
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1766.7	1766.7	1766.7	1766.7	1766.7
2.5°	1770.7	1766.7	1753.3	1766.7	1765.3
5°	1764.0	1758.7	1744.0	1757.3	1754.7
7.5°	1750.7	1745.3	1728.0	1738.6	1736.0
10°	1730.6	1726.6	1708.0	1712.0	1708.0
12.5°	1708.0	1702.6	1675.9	1678.6	1671.9
15°	1677.3	1669.3	1641.2	1639.9	1627.9
17.5°	1645.2	1633.2	1599.9	1593.2	1583.9
20°	1606.5	1593.2	1550.5	1543.8	1531.8
22.5°	1563.8	1550.5	1505.1	1490.5	1481.1
25°	1521.1	1501.1	1451.8	1434.4	1419.7
27.5°	1473.1	1449.1	1397.1	1374.4	1359.7
30°	1419.7	1394.4	1338.3	1307.7	1295.6
32.5°	1367.7	1337.0	1279.6	1244.9	1228.9
35°	1310.3	1278.3	1218.3	1179.6	1160.9
37.5°	1255.6	1216.9	1155.5	1110.2	1091.5
40°	1196.9	1156.9	1092.8	1042.1	1026.1
42.5°	1135.5	1094.2	1027.4	979.4	954.1
45°	1072.8	1034.1	960.7	907.4	887.3
47.5°	1007.4	967.4	894.0	839.3	816.6
50°	946.0	902.0	826.0	769.9	749.9
52.5°	879.3	834.0	763.2	701.9	681.8
55°	813.9	771.2	696.5	636.5	615.1
57.5°	747.2	701.9	629.8	571.1	552.4
60°	683.2	636.5	564.4	505.7	485.7
62.5°	615.1	571.1	497.7	444.3	424.3
65°	551.1	505.7	435.0	381.6	361.6
67.5°	487.0	441.7	373.6	322.9	306.9
70°	421.7	376.3	309.6	268.2	252.2
72.5°	357.6	313.6	252.2	214.8	205.5
75°	293.6	253.5	197.5	168.1	158.8
77.5°	228.2	196.1	149.4	126.8	118.8
80°	173.5	141.4	104.1	92.1	89.4
82.5°	120.1	92.1	69.4	65.4	64.0
85°	73.4	49.4	42.7	41.4	40.0
87.5°	30.7	21.3	20.0	20.0	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)