

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: P1007138

Luminaire Tested: S125RDR-B1090DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007138
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-B1090DB50-4F0-XX-W2A-F
Description: Define 5 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

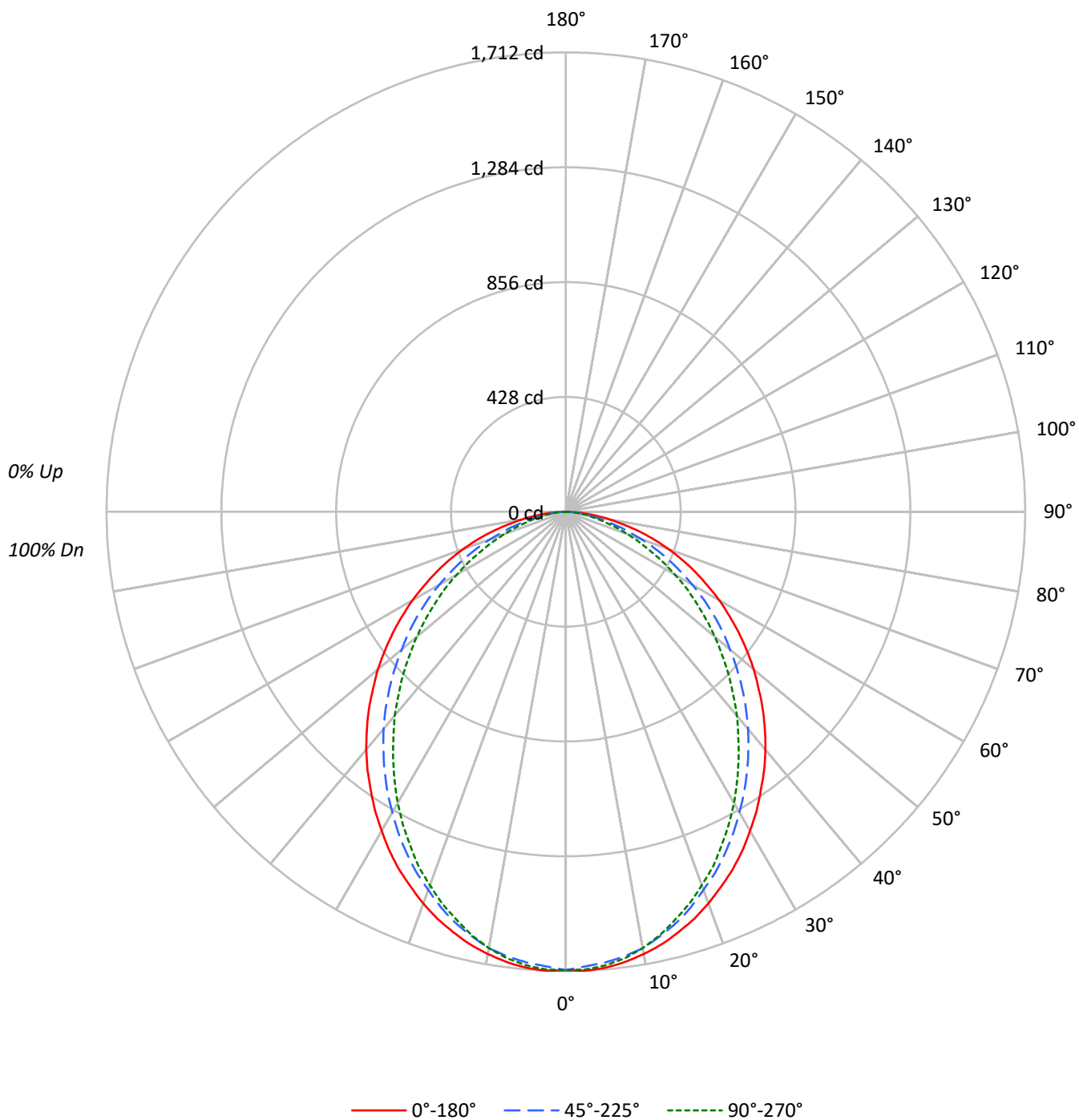
Lumens per Lamp: N/A
Luminaire Lumens: 4036.0 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1007138

CATALOG NUMBER: S125RDR-B1090DB50-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1007138

CATALOG NUMBER: S125RDR-B1090DB50-4F0-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°	10945	10945	10945
5°	10970	10846	10912
10°	10887	10745	10745
15°	10758	10527	10441
20°	10592	10222	10099
25°	10398	9924	9705
30°	10156	9574	9269
35°	9910	9214	8780
40°	9680	8838	8299
45°	9399	8418	7774
50°	9118	7960	7228
55°	8791	7523	6644
60°	8465	6994	6018
65°	8079	6376	5302
70°	7637	5607	4569
75°	7025	4728	3800
80°	6188	3712	3188
85°	5219	3036	2845

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9399 cd/sqm

TEST NUMBER: P1007138

CATALOG NUMBER: S125RDR-B1090DB50-4FO-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.8	4.0
10°-20°	449.3	11.1
20°-30°	651.5	16.1
30°-40°	742.2	18.4
40°-50°	723.5	17.9
50°-60°	608.8	15.1
60°-70°	426.7	10.6
70°-80°	218.7	5.4
80°-90°	54.6	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°	1261.6	31.3
0°-40°	2003.8	49.6
0°-60°	3336.1	82.7
0°-90°	4036.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4036.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1708	1708	1708	1708	1708	
5°	1706	1700	1686	1699	1697	162
15°	1622	1614	1587	1586	1574	457
25°	1471	1452	1404	1387	1373	677
35°	1267	1236	1178	1141	1122	793
45°	1037	1000	929	877	858	800
55°	787	746	674	615	595	704
65°	533	489	421	369	350	528
75°	284	245	191	163	154	300
85°	71	48	41	40	39	82
90°	0	0	0	0	0	



TEST NUMBER: P1007138

CATALOG NUMBER: S125RDR-B1090DB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1708.3	1708.3	1708.3	1708.3	1708.3
2.5°	1712.1	1708.3	1695.4	1708.3	1707.0
5°	1705.7	1700.5	1686.3	1699.2	1696.6
7.5°	1692.8	1687.6	1670.8	1681.2	1678.6
10°	1673.4	1669.5	1651.5	1655.4	1651.5
12.5°	1651.5	1646.3	1620.5	1623.1	1616.6
15°	1621.8	1614.1	1587.0	1585.7	1574.1
17.5°	1590.8	1579.2	1547.0	1540.5	1531.5
20°	1553.4	1540.5	1499.2	1492.8	1481.2
22.5°	1512.1	1499.2	1455.4	1441.2	1432.1
25°	1470.9	1451.5	1403.8	1387.0	1372.8
27.5°	1424.4	1401.2	1350.9	1328.9	1314.7
30°	1372.8	1348.3	1294.1	1264.4	1252.8
32.5°	1322.5	1292.8	1237.3	1203.8	1188.3
35°	1267.0	1236.0	1178.0	1140.6	1122.5
37.5°	1214.1	1176.7	1117.3	1073.5	1055.4
40°	1157.3	1118.6	1056.7	1007.7	992.2
42.5°	1098.0	1058.0	993.5	947.0	922.5
45°	1037.3	999.9	929.0	877.4	858.0
47.5°	974.1	935.4	864.4	811.6	789.6
50°	914.8	872.2	798.6	744.5	725.1
52.5°	850.3	806.4	738.0	678.7	659.3
55°	787.0	745.7	673.5	615.4	594.8
57.5°	722.5	678.7	609.0	552.2	534.2
60°	660.6	615.4	545.8	489.0	469.6
62.5°	594.8	552.2	481.3	429.6	410.3
65°	532.9	489.0	420.6	369.0	349.7
67.5°	470.9	427.1	361.3	312.2	296.8
70°	407.7	363.8	299.3	259.3	243.9
72.5°	345.8	303.2	243.9	207.7	198.7
75°	283.8	245.1	191.0	162.6	153.5
77.5°	220.6	189.7	144.5	122.6	114.8
80°	167.7	136.8	100.6	89.0	86.4
82.5°	116.1	89.0	67.1	63.2	61.9
85°	71.0	47.7	41.3	40.0	38.7
87.5°	29.7	20.6	19.4	19.4	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)