

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: P1004900

Luminaire Tested: S125R3DR-B850DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004900
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: S125R3DR-B850DB27-4F0-XX-W2A-F
Description: Define 5 3in Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

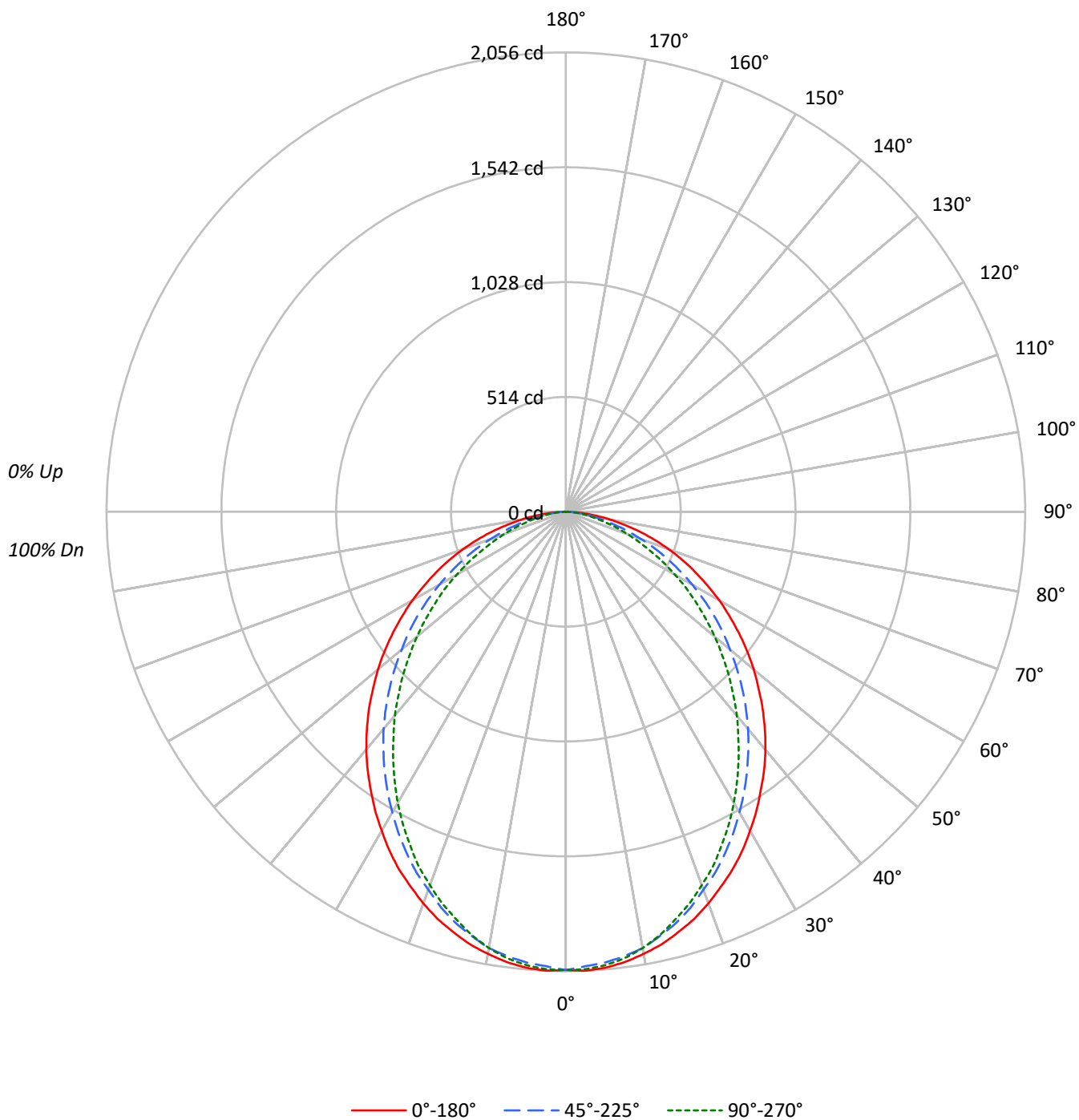
Lumens per Lamp: N/A
Luminaire Lumens: 4846.0 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
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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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°	13142	13142	13142
5°	13172	13023	13102
10°	13072	12901	12901
15°	12917	12639	12537
20°	12717	12274	12126
25°	12485	11916	11653
30°	12195	11495	11128
35°	11899	11063	10542
40°	11622	10612	9964
45°	11285	10107	9335
50°	10948	9558	8678
55°	10556	9034	7978
60°	10164	8397	7226
65°	9700	7656	6364
70°	9170	6733	5485
75°	8437	5676	4565
80°	7431	4457	3830
85°	6263	3646	3418

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11285 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.0	4.0
10°-20°	539.5	11.1
20°-30°	782.2	16.1
30°-40°	891.2	18.4
40°-50°	868.6	17.9
50°-60°	731.0	15.1
60°-70°	512.3	10.6
70°-80°	262.6	5.4
80°-90°	65.5	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°	1514.8	31.3
0°-40°	2405.9	49.6
0°-60°	4005.6	82.7
0°-90°	4846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4846.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2051	2051	2051	2051	2051	
5°	2048	2042	2025	2040	2037	194
15°	1947	1938	1906	1904	1890	549
25°	1766	1743	1686	1665	1648	813
35°	1521	1484	1414	1370	1348	953
45°	1246	1201	1115	1053	1030	961
55°	945	895	809	739	714	845
65°	640	587	505	443	420	634
75°	341	294	229	195	184	360
85°	85	57	50	48	46	98
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2051.1	2051.1	2051.1	2051.1	2051.1
2.5°	2055.7	2051.1	2035.6	2051.1	2049.5
5°	2048.0	2041.8	2024.8	2040.2	2037.1
7.5°	2032.5	2026.3	2006.2	2018.6	2015.5
10°	2009.3	2004.6	1982.9	1987.6	1982.9
12.5°	1982.9	1976.7	1945.7	1948.8	1941.1
15°	1947.3	1938.0	1905.5	1903.9	1890.0
17.5°	1910.1	1896.2	1857.4	1849.7	1838.9
20°	1865.2	1849.7	1800.1	1792.4	1778.4
22.5°	1815.6	1800.1	1747.5	1730.4	1719.6
25°	1766.0	1742.8	1685.5	1665.4	1648.3
27.5°	1710.3	1682.4	1622.0	1595.6	1578.6
30°	1648.3	1618.9	1553.8	1518.2	1504.2
32.5°	1587.9	1552.3	1485.6	1445.4	1426.8
35°	1521.3	1484.1	1414.4	1369.5	1347.8
37.5°	1457.8	1412.8	1341.6	1288.9	1267.2
40°	1389.6	1343.1	1268.8	1209.9	1191.3
42.5°	1318.3	1270.3	1192.9	1137.1	1107.7
45°	1245.5	1200.6	1115.4	1053.4	1030.2
47.5°	1169.6	1123.1	1037.9	974.4	948.1
50°	1098.4	1047.2	958.9	893.9	870.6
52.5°	1020.9	968.2	886.1	814.9	791.6
55°	945.0	895.4	808.7	739.0	714.2
57.5°	867.5	814.9	731.2	663.0	641.4
60°	793.2	739.0	655.3	587.1	563.9
62.5°	714.2	663.0	577.8	515.9	492.6
65°	639.8	587.1	505.0	443.1	419.8
67.5°	565.4	512.8	433.8	374.9	356.3
70°	489.5	436.9	359.4	311.4	292.8
72.5°	415.2	364.1	292.8	249.4	238.6
75°	340.8	294.3	229.3	195.2	184.4
77.5°	264.9	227.7	173.5	147.2	137.9
80°	201.4	164.2	120.8	106.9	103.8
82.5°	139.4	106.9	80.6	75.9	74.4
85°	85.2	57.3	49.6	48.0	46.5
87.5°	35.6	24.8	23.2	23.2	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)