

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: P1061789

Luminaire Tested: S125RDR-S850D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D850-X4F0-XX-UDD-SVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

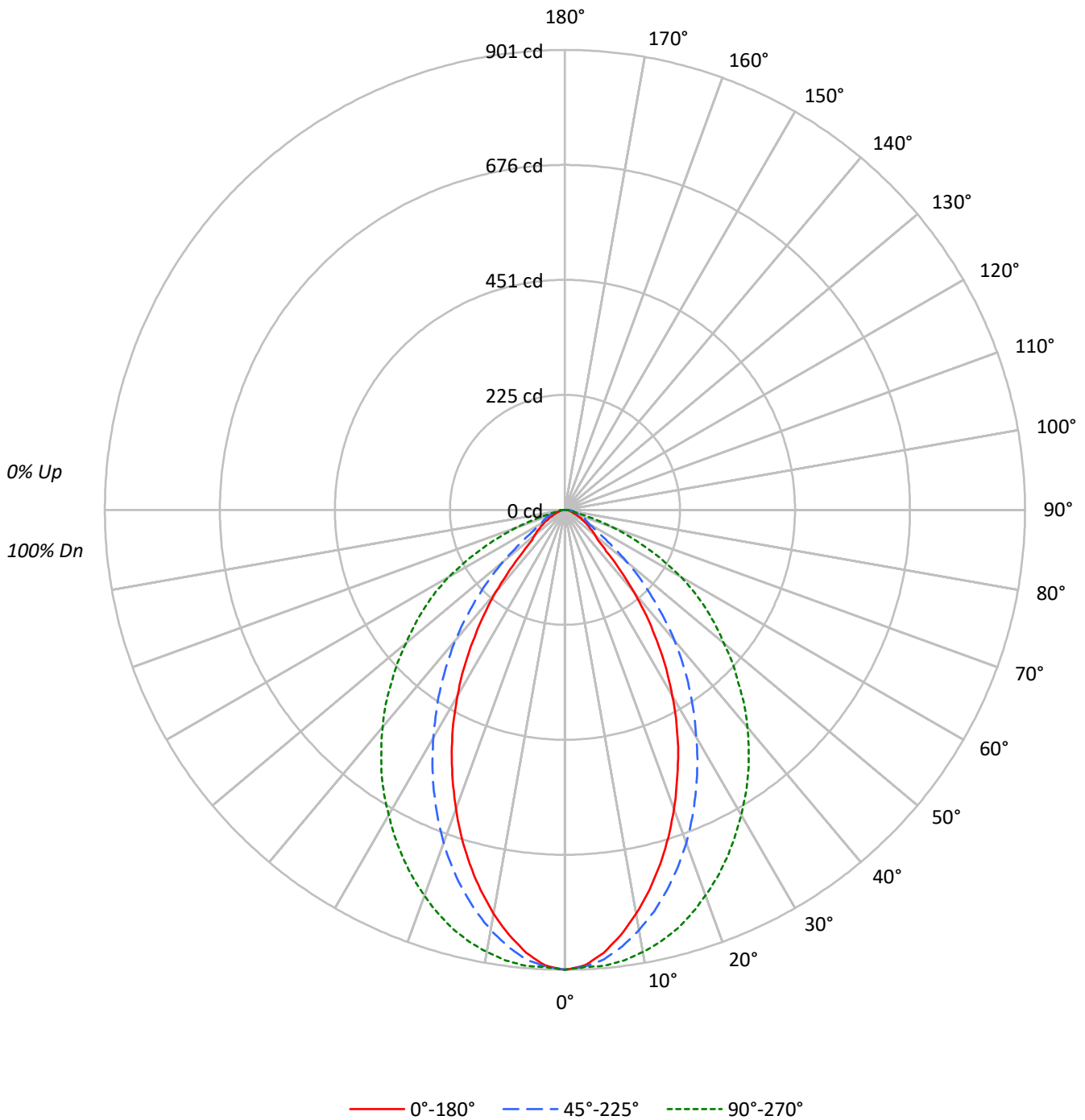
Lumens per Lamp: N/A
Luminaire Lumens: 1300.8 lumens
Efficiency: N/A
Efficacy: 50.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63				63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6202	6202	6202
5°	6019	6108	6196
10°	5618	5842	6149
15°	5127	5499	6055
20°	4573	5089	5895
25°	3986	4611	5707
30°	3347	4095	5488
35°	2641	3566	5263
40°	1892	2997	4995
45°	1113	2352	4683
50°	824	1695	4350
55°	693	1026	4041
60°	559	750	3605
65°	435	714	2890
70°	366	666	1957
75°	341	596	854
80°	337	595	551
85°	419	758	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4683 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	6.4
10°-20°	218.1	16.8
20°-30°	285.0	21.9
30°-40°	277.4	21.3
40°-50°	207.3	15.9
50°-60°	128.6	9.9
60°-70°	67.5	5.2
70°-80°	24.6	1.9
80°-90°	9.3	0.7
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°	586.0	45.1
0°-40°	863.4	66.4
0°-60°	1199.3	92.2
0°-90°	1300.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1300.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	901	901	901	901	901	
5°	871	883	884	889	896	81
15°	719	740	772	818	850	201
25°	525	551	607	689	751	240
35°	314	348	424	538	626	196
45°	114	150	242	377	481	96
55°	58	61	86	222	337	52
65°	27	29	44	94	177	28
75°	13	15	22	25	32	14
85°	5	10	10	10	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	900.8	900.8	900.8	900.8	900.8
2.5°	893.3	900.8	895.5	895.5	896.5
5°	870.9	882.7	883.7	889.1	896.5
7.5°	839.9	853.8	862.4	878.4	890.1
10°	803.6	819.6	835.6	862.4	879.5
12.5°	763.0	782.2	805.7	842.1	866.6
15°	719.2	740.5	771.5	818.5	849.5
17.5°	673.2	695.7	734.1	790.8	828.2
20°	624.1	648.6	694.6	758.7	804.6
22.5°	573.8	601.6	651.8	724.5	779.0
25°	524.7	551.4	607.0	689.2	751.2
27.5°	473.4	501.2	562.1	652.9	721.3
30°	421.0	450.9	515.1	615.5	690.3
32.5°	368.7	399.7	469.1	577.0	659.3
35°	314.2	348.4	424.2	537.5	626.2
37.5°	262.9	299.2	378.3	496.9	590.9
40°	210.5	247.9	333.4	457.4	555.7
42.5°	159.2	197.7	287.5	416.8	520.4
45°	114.3	149.6	241.5	377.2	480.9
47.5°	87.6	107.9	198.8	336.6	445.6
50°	76.9	83.4	158.2	297.1	406.1
52.5°	67.3	71.6	117.5	258.6	371.9
55°	57.7	60.9	85.5	222.3	336.6
57.5°	49.2	52.4	65.2	189.1	300.3
60°	40.6	43.8	54.5	156.0	261.8
62.5°	34.2	35.3	49.2	125.0	219.1
65°	26.7	28.9	43.8	94.0	177.4
67.5°	22.4	23.5	38.5	67.3	136.8
70°	18.2	19.2	33.1	47.0	97.2
72.5°	16.0	16.0	27.8	34.2	62.0
75°	12.8	15.0	22.4	24.6	32.1
77.5°	10.7	15.0	19.2	18.2	17.1
80°	8.5	13.9	15.0	15.0	13.9
82.5°	7.5	11.8	12.8	11.8	10.7
85°	5.3	9.6	9.6	9.6	7.5
87.5°	4.3	8.5	7.5	7.5	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)