

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: P1061772

Luminaire Tested: S125RDR-S850D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061772  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S850D835-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

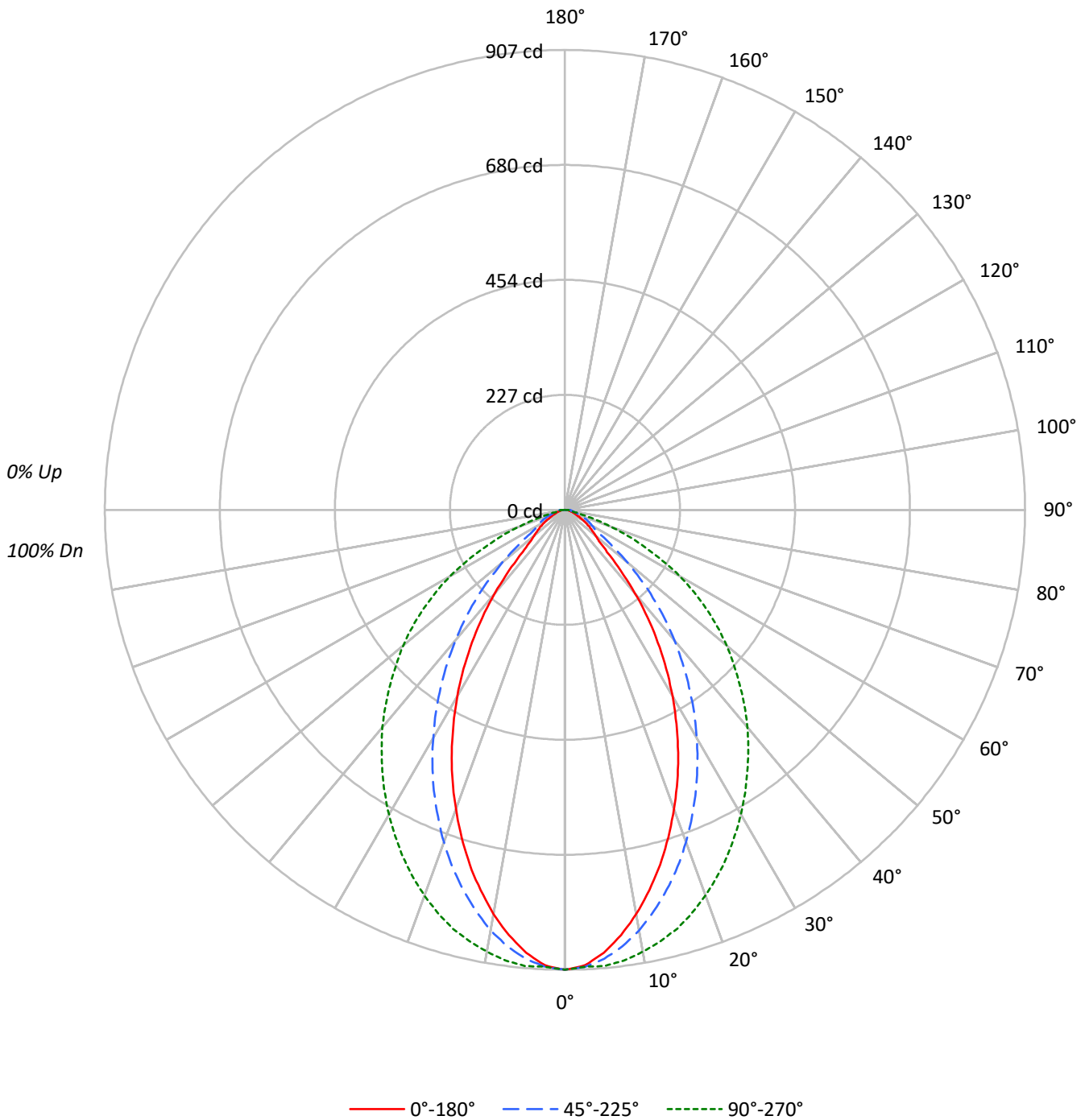
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1313.6 lumens  
Efficiency: N/A  
Efficacy: 50.9 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

TEST NUMBER: P1061772

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-SVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1061772

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-SVL-W

**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				
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6244	6244	6244
5°	6061	6142	6241
10°	5660	5889	6185
15°	5166	5530	6093
20°	4604	5112	5931
25°	4012	4642	5740
30°	3371	4129	5517
35°	2681	3588	5274
40°	1932	3015	5032
45°	1145	2392	4739
50°	846	1703	4459
55°	718	1053	4084
60°	584	850	3597
65°	455	785	2841
70°	389	678	1900
75°	359	591	769
80°	381	611	535
85°	458	916	608

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4739 cd/sqm



TEST NUMBER: P1061772

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-SVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.6	6.4
10°-20°	219.5	16.7
20°-30°	286.9	21.8
30°-40°	279.5	21.3
40°-50°	209.6	16.0
50°-60°	131.4	10.0
60°-70°	68.4	5.2
70°-80°	24.8	1.9
80°-90°	9.8	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°	590.0	44.9
0°-40°	869.5	66.2
0°-60°	1210.6	92.2
0°-90°	1313.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1313.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	907	907	907	907	907	
5°	877	889	889	895	903	82
15°	725	746	776	824	855	202
25°	528	557	611	694	756	241
35°	319	353	427	541	627	198
45°	118	152	246	380	487	99
55°	60	63	88	229	340	53
65°	28	30	48	92	174	29
75°	14	18	22	23	29	15
85°	6	10	12	11	8	6
90°	0	0	0	0	0	



TEST NUMBER: P1061772

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-SVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	906.9	906.9	906.9	906.9	906.9
2.5°	899.2	907.8	902.0	902.0	902.0
5°	877.0	888.6	888.6	895.3	903.0
7.5°	846.1	859.6	868.3	884.7	896.3
10°	809.5	825.9	842.3	869.3	884.7
12.5°	768.1	787.4	810.5	848.1	871.2
15°	724.7	745.9	775.8	824.0	854.8
17.5°	677.5	702.6	738.2	796.0	833.6
20°	628.3	653.4	697.7	763.3	809.5
22.5°	579.2	606.2	654.4	728.6	783.5
25°	528.1	557.0	611.0	693.9	755.6
27.5°	476.1	506.0	565.7	658.2	724.7
30°	424.0	454.9	519.4	619.7	693.9
32.5°	372.0	404.8	473.2	580.2	661.1
35°	319.0	352.7	426.9	540.6	627.4
37.5°	267.9	301.6	380.7	500.2	593.7
40°	214.9	251.5	335.4	459.7	559.9
42.5°	162.9	200.5	290.1	419.2	523.3
45°	117.6	152.3	245.7	379.7	486.7
47.5°	90.6	109.9	200.5	339.2	451.0
50°	79.0	84.8	159.0	301.6	416.3
52.5°	68.4	72.3	119.5	267.0	378.7
55°	59.8	62.6	87.7	229.4	340.2
57.5°	50.1	54.0	69.4	192.7	300.7
60°	42.4	44.3	61.7	159.0	261.2
62.5°	34.7	36.6	54.9	125.3	216.8
65°	27.9	29.9	48.2	92.5	174.4
67.5°	23.1	24.1	40.5	65.5	134.0
70°	19.3	20.2	33.7	45.3	94.4
72.5°	16.4	19.3	27.0	32.8	59.8
75°	13.5	18.3	22.2	23.1	28.9
77.5°	11.6	17.3	18.3	18.3	16.4
80°	9.6	14.5	15.4	14.5	13.5
82.5°	7.7	11.6	12.5	12.5	10.6
85°	5.8	9.6	11.6	10.6	7.7
87.5°	3.9	8.7	9.6	8.7	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)