

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: P1061706

Luminaire Tested: S125RDR-S610D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061706  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S610D850-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

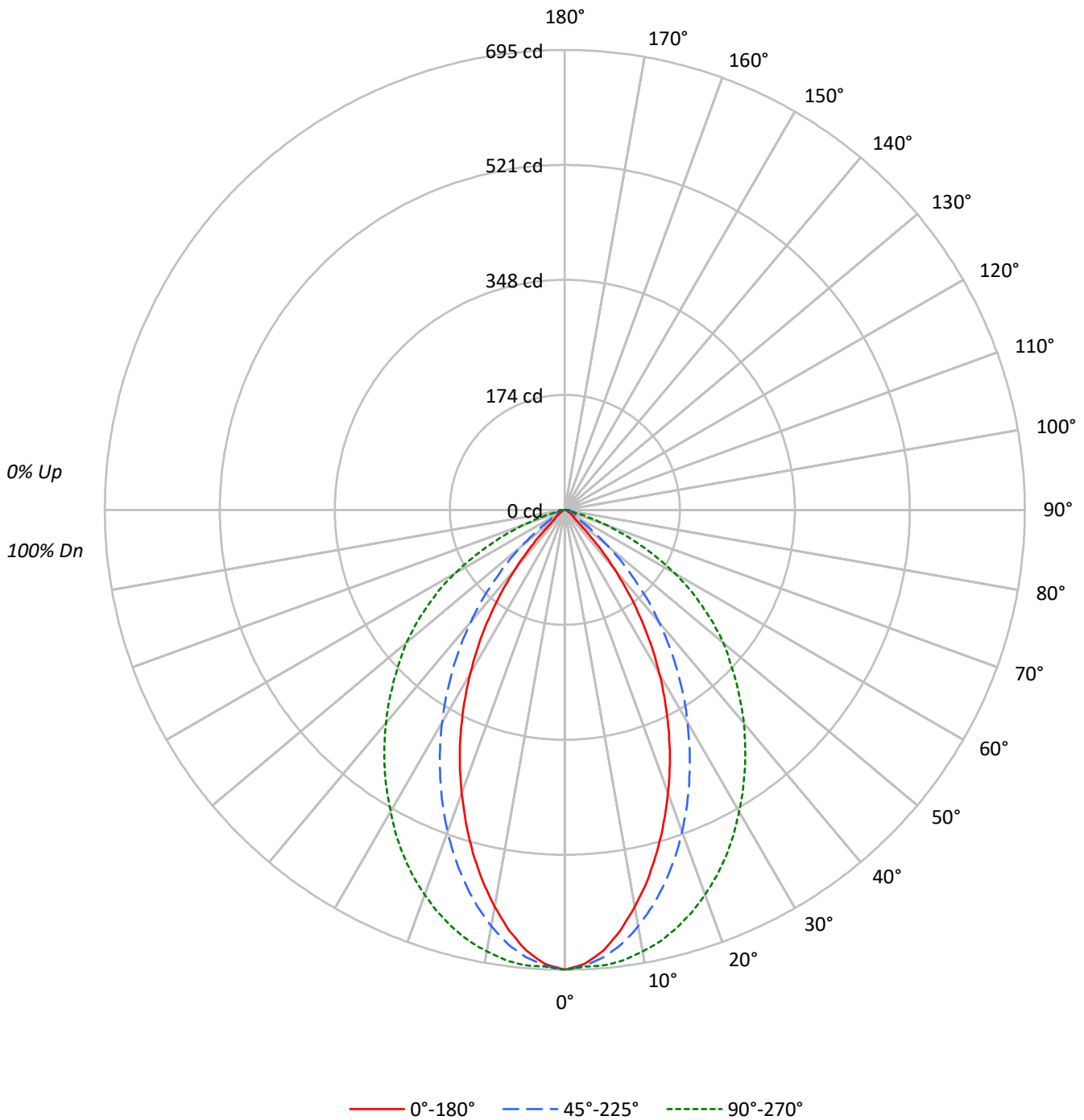
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 898.8 lumens  
Efficiency: N/A  
Efficacy: 45.9 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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: P1061706

CATALOG NUMBER: S125RDR-S610D850-X4F0-XX-UDD-BVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1061706

CATALOG NUMBER: S125RDR-S610D850-X4F0-XX-UDD-BVL-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			100	
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90	
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			80	
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65			65	
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59			59	
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45			45	
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41			41	
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38			38	

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

	0°	45°	90°
0°	4783	4783	4783
5°	4620	4689	4775
10°	4258	4468	4738
15°	3824	4160	4660
20°	3337	3795	4536
25°	2827	3384	4380
30°	2271	2946	4185
35°	1680	2485	3990
40°	1041	1985	3781
45°	406	1451	3555
50°	191	909	3348
55°	139	389	3039
60°	95	277	2636
65°	64	290	2050
70°	62	264	1290
75°	82	266	410
80°	123	305	274
85°	182	608	427

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3555 cd/sqm



TEST NUMBER: P1061706

CATALOG NUMBER: S125RDR-S610D850-X4F0-XX-UDD-BVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.7	7.1
10°-20°	165.1	18.4
20°-30°	210.2	23.4
30°-40°	195.7	21.8
40°-50°	134.7	15.0
50°-60°	76.3	8.5
60°-70°	36.0	4.0
70°-80°	11.3	1.3
80°-90°	5.9	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°	439.0	48.8
0°-40°	634.7	70.6
0°-60°	845.7	94.1
0°-90°	898.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	898.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	668	678	678	685	691	62
15°	536	554	584	628	654	149
25°	372	396	445	520	577	170
35°	200	228	296	397	475	124
45°	42	66	149	269	365	39
55°	12	13	32	155	253	11
65°	4	5	18	56	126	4
75°	3	7	10	11	15	3
85°	2	6	8	7	5	3
90°	0	0	0	0	0	



TEST NUMBER: P1061706

CATALOG NUMBER: S125RDR-S610D850-X4F0-XX-UDD-BVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	694.7	694.7	694.7	694.7	694.7
2.5°	687.0	694.0	689.3	690.1	690.9
5°	668.5	677.7	678.5	684.7	690.9
7.5°	641.5	653.0	661.5	676.2	686.2
10°	609.0	622.9	639.1	663.1	677.7
12.5°	574.3	590.5	612.9	646.9	667.7
15°	536.5	554.2	583.6	627.6	653.8
17.5°	496.3	516.4	551.9	604.4	637.6
20°	455.4	477.0	518.0	578.2	619.1
22.5°	414.5	436.9	482.4	549.6	599.0
25°	372.1	396.0	445.4	520.3	576.6
27.5°	328.8	353.5	408.3	490.2	552.7
30°	285.6	311.9	370.5	459.3	526.4
32.5°	243.2	269.4	333.5	428.4	501.0
35°	199.9	227.7	295.6	396.8	474.7
37.5°	156.7	186.8	258.6	364.3	447.7
40°	115.8	144.3	220.8	332.7	420.7
42.5°	77.2	105.0	186.8	301.0	392.9
45°	41.7	66.4	149.0	269.4	365.1
47.5°	22.4	35.5	116.6	238.5	338.1
50°	17.8	20.1	84.9	210.0	312.6
52.5°	14.7	16.2	55.6	182.9	283.3
55°	11.6	13.1	32.4	155.2	253.2
57.5°	9.3	10.8	20.8	128.9	223.9
60°	6.9	8.5	20.1	103.4	191.4
62.5°	5.4	6.2	18.5	79.5	157.5
65°	3.9	4.6	17.8	55.6	125.8
67.5°	3.1	3.9	16.2	35.5	94.2
70°	3.1	3.1	13.1	23.2	64.1
72.5°	3.1	5.4	11.6	15.4	38.6
75°	3.1	6.9	10.0	10.8	15.4
77.5°	3.1	7.7	8.5	8.5	8.5
80°	3.1	6.9	7.7	7.7	6.9
82.5°	3.1	6.2	6.9	7.7	6.2
85°	2.3	6.2	7.7	6.9	5.4
87.5°	2.3	6.2	6.9	6.2	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)