

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: P1175389

Luminaire Tested: S125RDR-S850D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175389  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S850D935-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

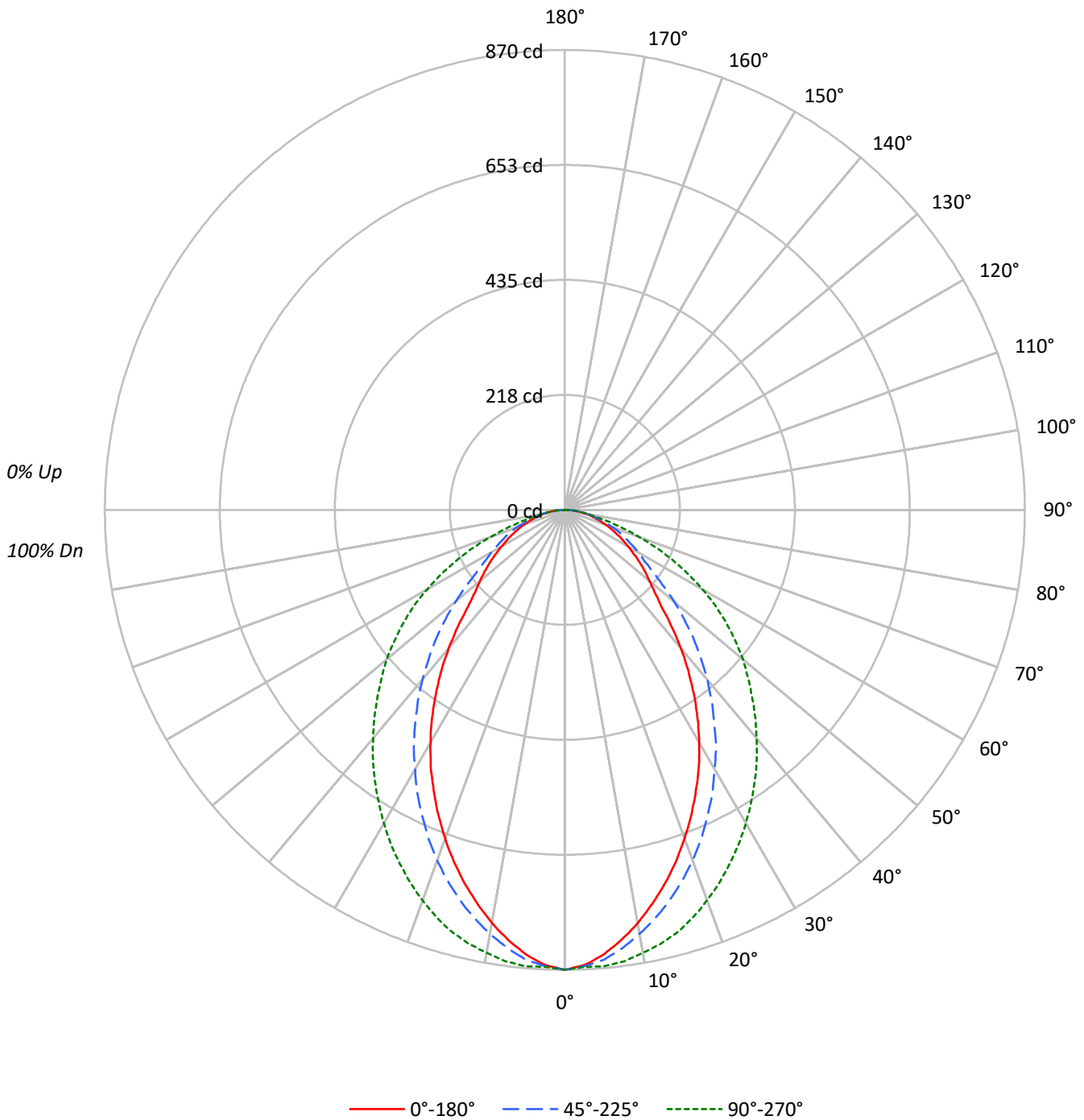
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1638.9 lumens  
Efficiency: N/A  
Efficacy: 63.5 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
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				
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				

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

	0°	45°	90°
0°	5990	5990	5990
5°	5834	5900	5987
10°	5551	5695	5948
15°	5217	5454	5891
20°	4848	5173	5763
25°	4455	4848	5610
30°	4040	4503	5443
35°	3576	4140	5263
40°	3067	3763	5071
45°	2517	3351	4875
50°	2239	2879	4707
55°	2066	2412	4468
60°	1902	2196	4139
65°	1769	2069	3658
70°	1651	1933	2987
75°	1551	1788	2240
80°	1463	1642	1610
85°	1343	1635	1343

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4875 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.5	4.9
10°-20°	217.1	13.2
20°-30°	298.7	18.2
30°-40°	316.8	19.3
40°-50°	277.2	16.9
50°-60°	212.7	13.0
60°-70°	141.7	8.6
70°-80°	72.7	4.4
80°-90°	21.6	1.3
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°	596.3	36.4
0°-40°	913.0	55.7
0°-60°	1403.0	85.6
0°-90°	1638.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1638.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	870	870	870	870	870	
5°	844	855	854	860	866	79
15°	732	749	765	801	826	205
25°	586	606	638	692	738	269
35°	425	445	493	565	626	265
45°	258	280	344	430	501	204
55°	172	176	201	298	372	154
65°	109	109	127	167	224	108
75°	58	62	67	71	84	62
85°	17	19	21	20	17	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	870.0	870.0	870.0	870.0	870.0
2.5°	861.8	870.7	864.0	864.8	865.5
5°	844.1	855.2	853.7	859.6	866.3
7.5°	820.5	832.3	836.0	850.8	861.1
10°	793.9	807.2	814.6	836.7	850.8
12.5°	763.6	779.1	790.9	819.7	840.4
15°	731.9	748.8	765.1	801.3	826.4
17.5°	697.9	714.9	736.3	777.6	807.9
20°	661.7	680.2	706.0	750.3	786.5
22.5°	624.8	644.0	673.5	722.3	763.6
25°	586.4	606.3	638.1	692.0	738.5
27.5°	548.7	567.2	604.1	661.7	712.7
30°	508.1	527.3	566.4	629.9	684.6
32.5°	467.5	486.7	531.7	598.2	655.8
35°	425.4	445.3	492.6	565.0	626.2
37.5°	383.3	404.0	456.4	531.0	596.0
40°	341.2	363.3	418.7	497.0	564.2
42.5°	298.4	322.0	380.3	463.8	533.2
45°	258.5	279.9	344.1	429.8	500.7
47.5°	229.7	242.2	305.7	395.1	469.7
50°	209.0	214.9	268.8	361.9	439.4
52.5°	190.5	194.2	232.6	330.8	406.2
55°	172.1	175.8	200.9	298.4	372.2
57.5°	154.3	156.6	177.2	265.9	338.2
60°	138.1	139.6	159.5	233.4	300.6
62.5°	123.3	124.1	142.5	200.1	262.9
65°	108.6	109.3	127.0	166.9	224.5
67.5°	95.3	95.3	112.3	136.6	187.6
70°	82.0	82.0	96.0	110.8	148.4
72.5°	70.2	71.6	81.2	89.4	115.9
75°	58.3	62.0	67.2	70.9	84.2
77.5°	47.3	51.7	53.9	55.4	56.1
80°	36.9	39.9	41.4	42.1	40.6
82.5°	27.3	29.5	30.3	30.3	28.1
85°	17.0	19.2	20.7	19.9	17.0
87.5°	8.1	11.1	11.8	10.3	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)