

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: P1061781

Luminaire Tested: S125RDR-S850D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061781  
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-S850D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

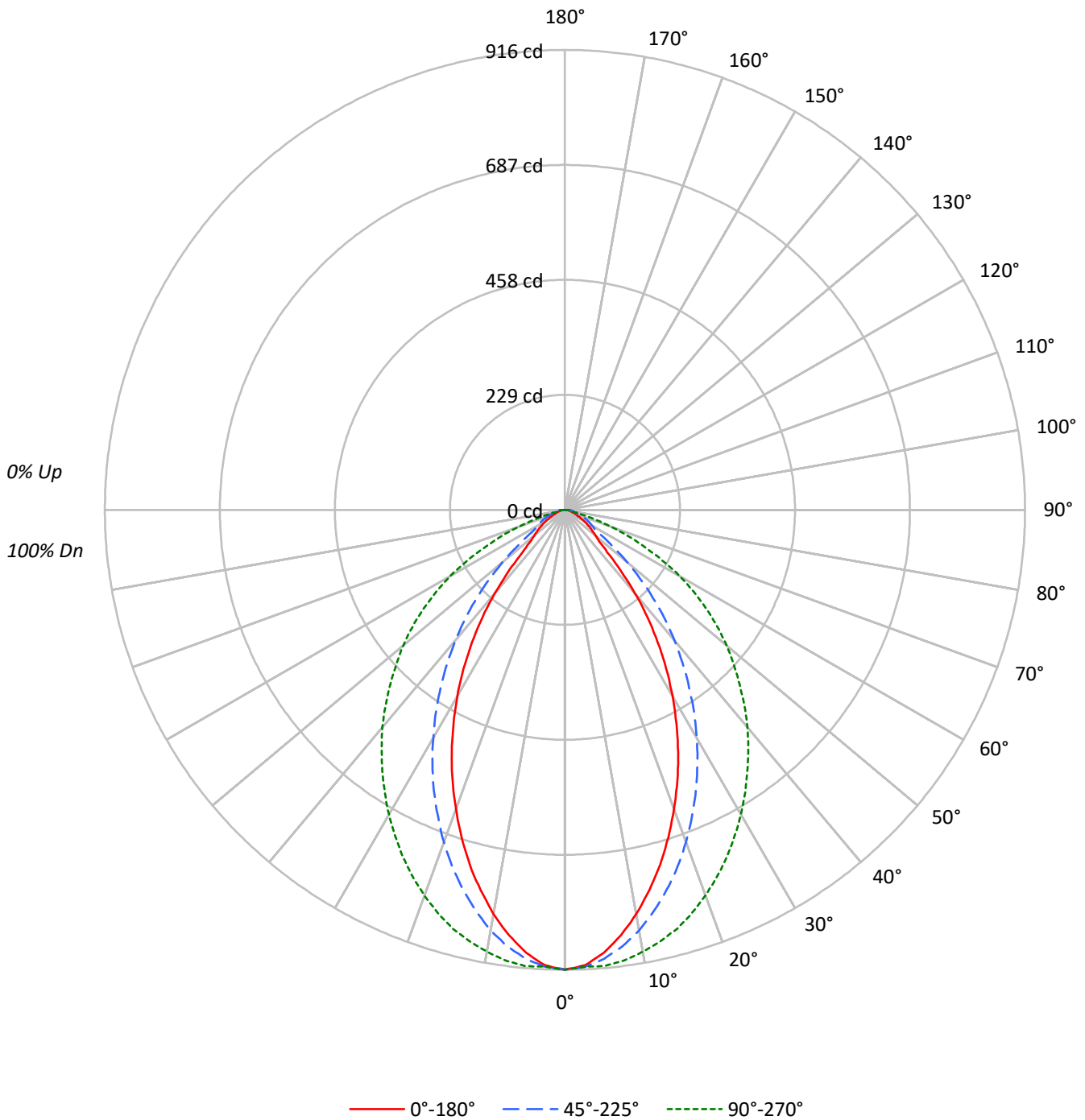
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1326.5 lumens  
Efficiency: N/A  
Efficacy: 51.4 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	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	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	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	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	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

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

	0°	45°	90°
0°	6306	6306	6306
5°	6121	6202	6303
10°	5716	5947	6246
15°	5217	5584	6154
20°	4649	5163	5990
25°	4051	4687	5797
30°	3404	4171	5571
35°	2707	3624	5326
40°	1950	3044	5082
45°	1156	2417	4786
50°	855	1720	4503
55°	724	1064	4123
60°	589	858	3631
65°	459	793	2871
70°	393	686	1921
75°	362	596	777
80°	385	619	539
85°	458	924	616

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4786 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.4	6.4
10°-20°	221.7	16.7
20°-30°	289.7	21.8
30°-40°	282.3	21.3
40°-50°	211.7	16.0
50°-60°	132.7	10.0
60°-70°	69.1	5.2
70°-80°	25.0	1.9
80°-90°	9.9	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°	595.8	44.9
0°-40°	878.1	66.2
0°-60°	1222.5	92.2
0°-90°	1326.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1326.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	916	916	916	916	916	
5°	886	897	897	904	912	82
15°	732	753	783	832	863	204
25°	533	562	617	701	763	244
35°	322	356	431	546	634	200
45°	119	154	248	384	492	100
55°	60	63	89	232	344	54
65°	28	30	49	93	176	29
75°	14	18	22	23	29	15
85°	6	10	12	11	8	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	915.8	915.8	915.8	915.8	915.8
2.5°	908.0	916.8	910.9	910.9	910.9
5°	885.6	897.3	897.3	904.1	911.9
7.5°	854.5	868.1	876.9	893.4	905.1
10°	817.5	834.1	850.6	877.9	893.4
12.5°	775.7	795.1	818.5	856.4	879.8
15°	731.9	753.3	783.4	832.1	863.3
17.5°	684.2	709.5	745.5	803.9	841.8
20°	634.5	659.8	704.6	770.8	817.5
22.5°	584.9	612.2	660.8	735.8	791.2
25°	533.3	562.5	617.0	700.7	763.0
27.5°	480.8	510.9	571.3	664.7	731.9
30°	428.2	459.4	524.6	625.8	700.7
32.5°	375.7	408.8	477.9	585.9	667.6
35°	322.1	356.2	431.1	546.0	633.6
37.5°	270.6	304.6	384.4	505.1	599.5
40°	217.0	254.0	338.7	464.2	565.4
42.5°	164.5	202.4	292.9	423.4	528.5
45°	118.7	153.8	248.2	383.5	491.5
47.5°	91.5	110.9	202.4	342.6	455.5
50°	79.8	85.6	160.6	304.6	420.4
52.5°	69.1	73.0	120.7	269.6	382.5
55°	60.3	63.3	88.6	231.6	343.5
57.5°	50.6	54.5	70.1	194.6	303.6
60°	42.8	44.8	62.3	160.6	263.7
62.5°	35.0	37.0	55.5	126.5	219.0
65°	28.2	30.2	48.7	93.4	176.2
67.5°	23.4	24.3	40.9	66.2	135.3
70°	19.5	20.4	34.1	45.7	95.4
72.5°	16.5	19.5	27.3	33.1	60.3
75°	13.6	18.5	22.4	23.4	29.2
77.5°	11.7	17.5	18.5	18.5	16.5
80°	9.7	14.6	15.6	14.6	13.6
82.5°	7.8	11.7	12.7	12.7	10.7
85°	5.8	9.7	11.7	10.7	7.8
87.5°	3.9	8.8	9.7	8.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)