

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: P1061809

Luminaire Tested: S125RDR-S850D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061809  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S850D930-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

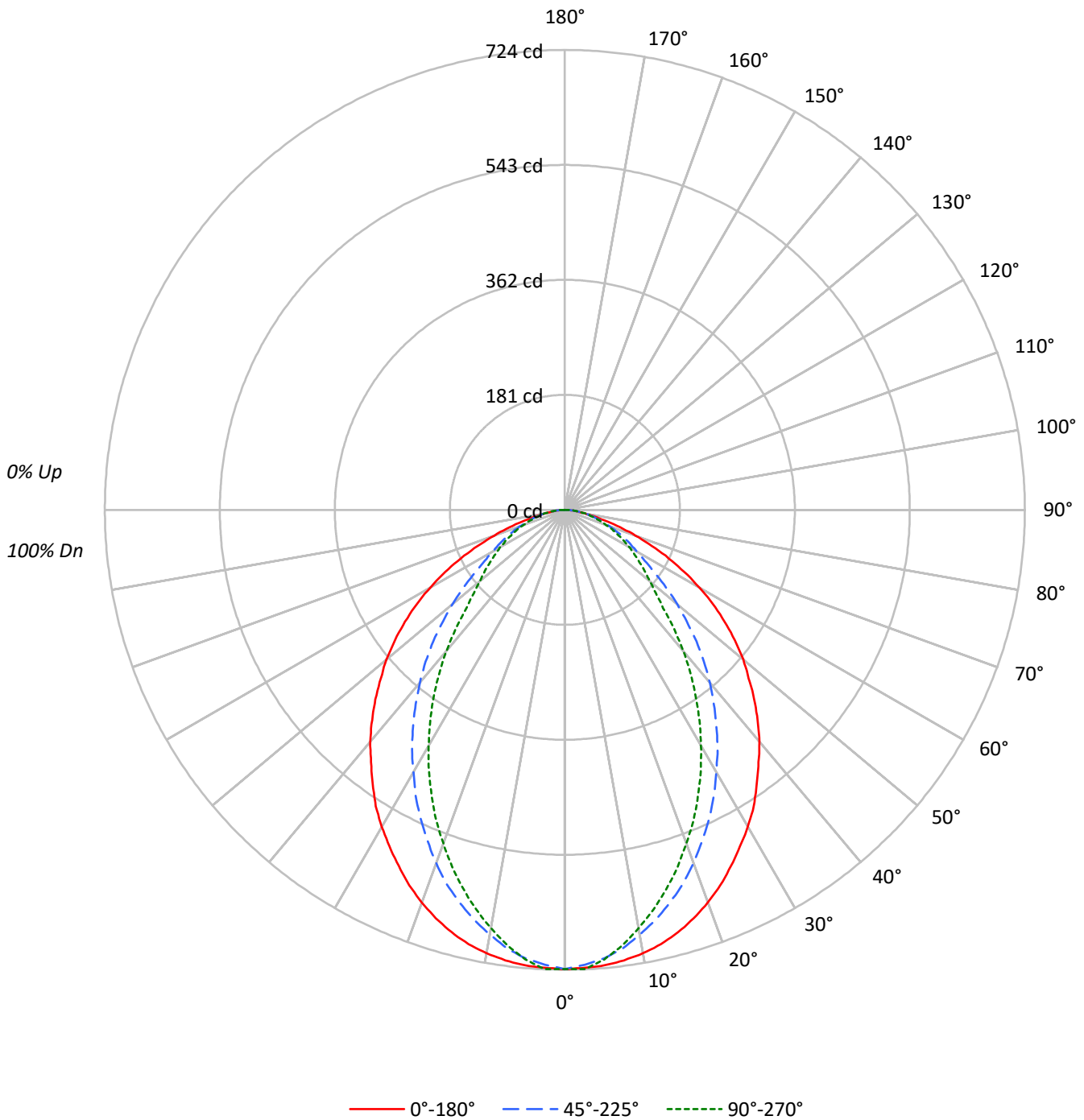
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1369.7 lumens  
Efficiency: N/A  
Efficacy: 53.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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	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	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

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

	0°	45°	90°
0°	4978	4978	4978
5°	4976	4900	4911
10°	4956	4748	4676
15°	4908	4561	4404
20°	4821	4337	4095
25°	4700	4080	3769
30°	4581	3788	3408
35°	4428	3497	3022
40°	4283	3189	2604
45°	4105	2851	2132
50°	3927	2472	1867
55°	3684	2063	1725
60°	3361	1805	1611
65°	2942	1650	1496
70°	2386	1486	1391
75°	1713	1357	1296
80°	1182	1213	1213
85°	869	1051	1114

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4105 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.2	4.9
10°-20°	181.8	13.3
20°-30°	251.3	18.3
30°-40°	267.7	19.5
40°-50°	235.1	17.2
50°-60°	178.3	13.0
60°-70°	115.8	8.5
70°-80°	57.4	4.2
80°-90°	15.0	1.1
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°	500.4	36.5
0°-40°	768.1	56.1
0°-60°	1181.5	86.3
0°-90°	1369.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1369.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	720	718	709	711	710	68
15°	688	673	640	625	618	194
25°	619	585	537	510	496	285
35°	527	478	416	378	360	330
45°	422	363	293	240	219	325
55°	307	246	172	148	144	274
65°	181	134	101	93	92	178
75°	64	56	51	50	49	72
85°	11	13	13	13	14	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	723.0	723.0	723.0	723.0	723.0
2.5°	721.4	723.0	716.7	722.2	723.8
5°	719.9	718.3	708.9	711.2	710.5
7.5°	715.2	712.0	696.3	694.8	691.6
10°	708.9	701.0	679.1	673.6	668.8
12.5°	700.2	687.7	661.0	650.0	644.5
15°	688.5	672.8	639.8	624.9	617.8
17.5°	674.3	652.4	617.8	597.4	589.6
20°	657.9	632.0	591.9	568.4	558.9
22.5°	639.8	609.2	564.4	539.3	529.1
25°	618.6	584.8	537.0	509.5	496.1
27.5°	597.4	559.7	507.9	477.3	463.2
30°	576.2	533.0	476.5	443.5	428.6
32.5°	553.4	505.6	447.5	411.4	394.1
35°	526.8	478.1	416.1	378.4	359.5
37.5°	500.9	449.0	385.5	343.1	325.0
40°	476.5	421.6	354.8	308.5	289.7
42.5°	449.0	392.5	324.2	275.5	254.4
45°	421.6	362.7	292.8	240.2	219.0
47.5°	392.5	334.4	259.8	208.0	193.9
50°	366.6	305.4	230.8	183.7	174.3
52.5°	336.8	277.1	201.0	164.9	158.6
55°	306.9	246.5	171.9	148.4	143.7
57.5°	276.3	219.0	149.2	134.2	129.5
60°	244.1	190.8	131.1	119.3	117.0
62.5°	212.0	161.7	115.4	106.8	103.6
65°	180.6	134.2	101.3	93.4	91.8
67.5°	148.4	109.1	87.1	81.6	80.9
70°	118.5	88.7	73.8	70.7	69.1
72.5°	91.1	70.7	62.0	59.7	58.9
75°	64.4	56.5	51.0	49.5	48.7
77.5°	43.2	43.2	40.8	39.3	40.0
80°	29.8	31.4	30.6	30.6	30.6
82.5°	19.6	21.2	22.0	22.0	22.0
85°	11.0	12.6	13.3	13.3	14.1
87.5°	3.9	4.7	5.5	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)