

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: P1061769

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061769  
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-S850D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

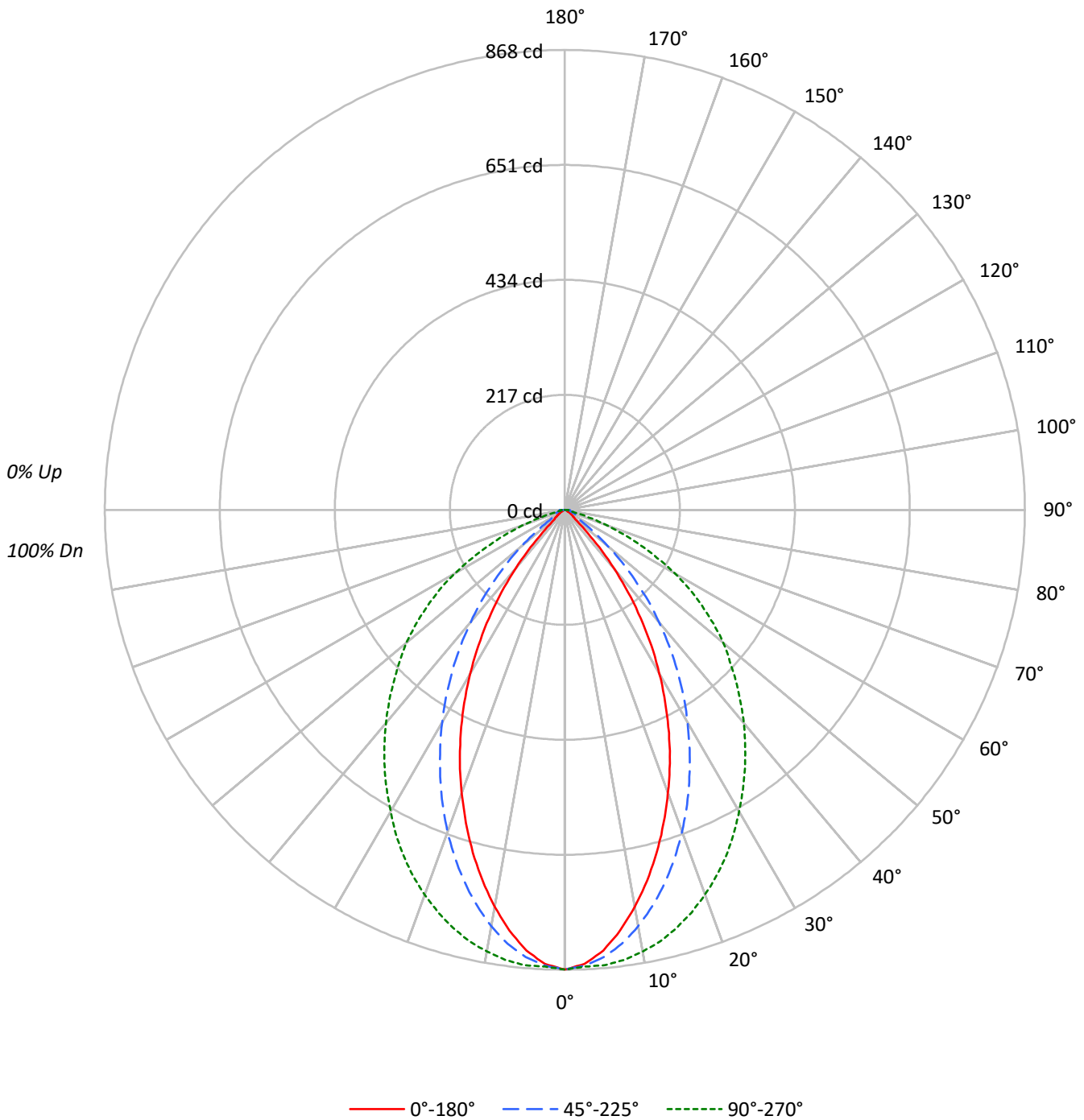
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1122.3 lumens  
Efficiency: N/A  
Efficacy: 43.5 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): 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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				

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

	0°	45°	90°
0°	5973	5973	5973
5°	5769	5855	5963
10°	5317	5580	5917
15°	4775	5194	5819
20°	4167	4739	5664
25°	3530	4225	5470
30°	2835	3679	5227
35°	2098	3103	4983
40°	1300	2478	4721
45°	506	1811	4439
50°	238	1135	4182
55°	174	486	3794
60°	120	346	3291
65°	78	362	2559
70°	79	330	1610
75°	104	333	513
80°	155	381	345
85°	229	758	529

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4439 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.6	7.1
10°-20°	206.1	18.4
20°-30°	262.5	23.4
30°-40°	244.4	21.8
40°-50°	168.2	15.0
50°-60°	95.2	8.5
60°-70°	45.0	4.0
70°-80°	14.1	1.3
80°-90°	7.3	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°	548.2	48.8
0°-40°	792.6	70.6
0°-60°	1056.0	94.1
0°-90°	1122.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1122.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	868	868	868	868	868	
5°	835	846	847	855	863	77
15°	670	692	729	784	816	187
25°	465	494	556	650	720	212
35°	250	284	369	495	593	154
45°	52	83	186	336	456	49
55°	14	16	40	194	316	13
65°	5	6	22	69	157	5
75°	4	9	12	14	19	4
85°	3	8	10	9	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	867.5	867.5	867.5	867.5	867.5
2.5°	857.8	866.5	860.7	861.7	862.7
5°	834.7	846.3	847.2	854.9	862.7
7.5°	801.0	815.4	826.0	844.3	856.9
10°	760.5	777.8	798.1	828.0	846.3
12.5°	717.1	737.4	765.3	807.7	833.7
15°	669.9	692.1	728.7	783.6	816.4
17.5°	619.8	644.8	689.2	754.7	796.2
20°	568.7	595.7	646.8	721.9	773.0
22.5°	517.6	545.5	602.4	686.3	748.0
25°	464.6	494.5	556.1	649.6	720.0
27.5°	410.6	441.4	509.9	612.1	690.1
30°	356.6	389.4	462.7	573.5	657.4
32.5°	303.6	336.4	416.4	534.9	625.5
35°	249.6	284.3	369.2	495.4	592.8
37.5°	195.7	233.3	322.9	454.9	559.0
40°	144.6	180.2	275.7	415.4	525.3
42.5°	96.4	131.1	233.3	375.9	490.6
45°	52.0	82.9	186.0	336.4	455.9
47.5°	28.0	44.3	145.5	297.8	422.2
50°	22.2	25.1	106.0	262.2	390.4
52.5°	18.3	20.2	69.4	228.4	353.7
55°	14.5	16.4	40.5	193.7	316.1
57.5°	11.6	13.5	26.0	161.0	279.5
60°	8.7	10.6	25.1	129.2	239.0
62.5°	6.7	7.7	23.1	99.3	196.6
65°	4.8	5.8	22.2	69.4	157.1
67.5°	3.9	4.8	20.2	44.3	117.6
70°	3.9	3.9	16.4	28.9	80.0
72.5°	3.9	6.7	14.5	19.3	48.2
75°	3.9	8.7	12.5	13.5	19.3
77.5°	3.9	9.6	10.6	10.6	10.6
80°	3.9	8.7	9.6	9.6	8.7
82.5°	3.9	7.7	8.7	9.6	7.7
85°	2.9	7.7	9.6	8.7	6.7
87.5°	2.9	7.7	8.7	7.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)