

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: P1175432

Luminaire Tested: S125RDR-H850D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175432  
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-H850D927-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

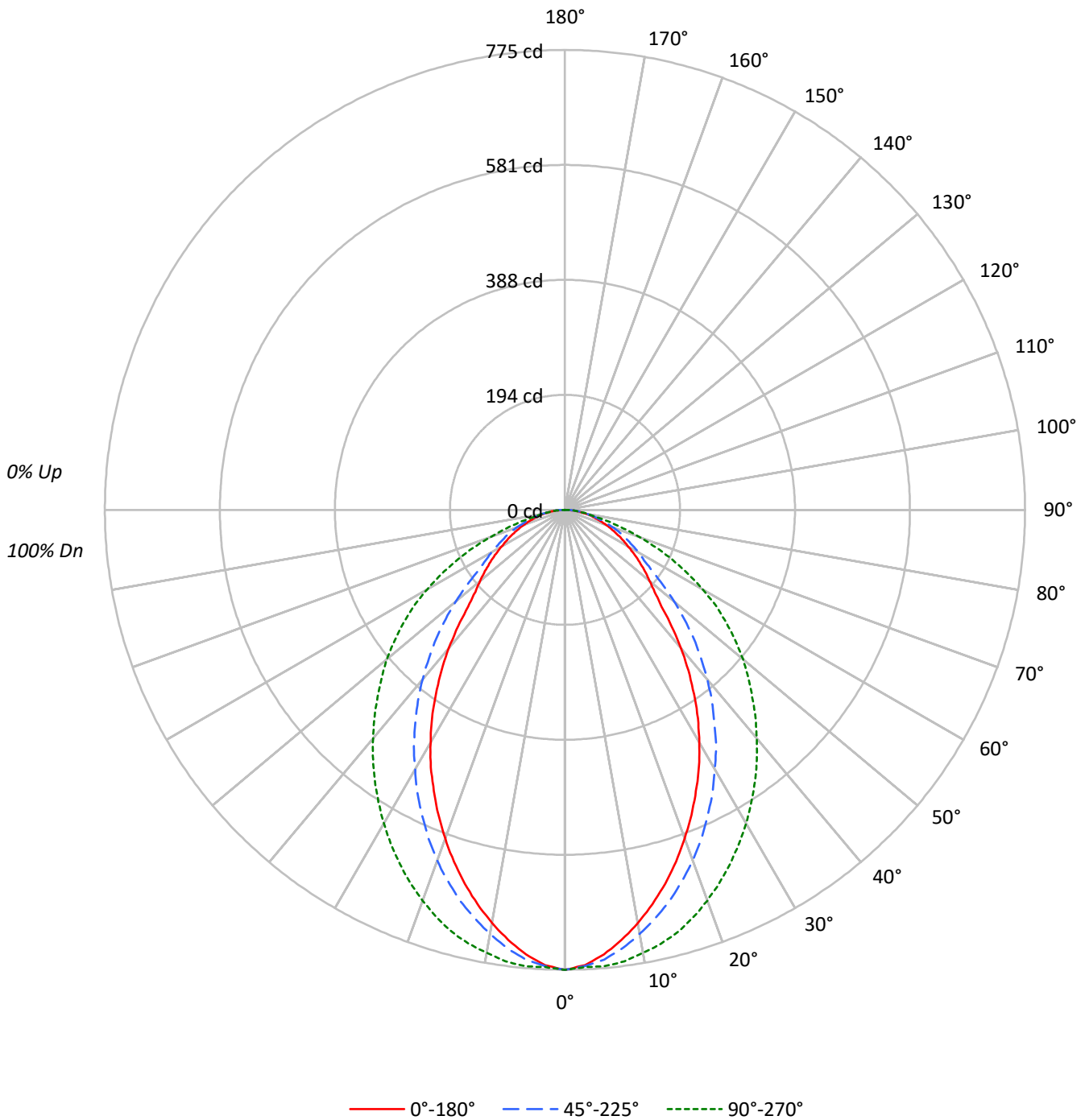
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1460.2 lumens  
Efficiency: N/A  
Efficacy: 62.1 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): 23.5  
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																		
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	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°	5337	5337	5337
5°	5198	5257	5334
10°	4945	5074	5300
15°	4648	4859	5248
20°	4320	4609	5135
25°	3969	4319	4999
30°	3599	4013	4850
35°	3186	3689	4690
40°	2732	3353	4518
45°	2242	2985	4344
50°	1994	2565	4194
55°	1840	2149	3981
60°	1694	1957	3688
65°	1575	1844	3258
70°	1470	1721	2663
75°	1383	1593	1995
80°	1305	1459	1435
85°	1193	1454	1193

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4344 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.8	4.9
10°-20°	193.4	13.2
20°-30°	266.1	18.2
30°-40°	282.2	19.3
40°-50°	247.0	16.9
50°-60°	189.5	13.0
60°-70°	126.3	8.6
70°-80°	64.7	4.4
80°-90°	19.2	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°	531.3	36.4
0°-40°	813.5	55.7
0°-60°	1250.0	85.6
0°-90°	1460.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1460.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	752	762	761	766	772	70
15°	652	667	682	714	736	183
25°	522	540	568	616	658	240
35°	379	397	439	503	558	236
45°	230	249	307	383	446	182
55°	153	157	179	266	332	137
65°	97	97	113	149	200	96
75°	52	55	60	63	75	55
85°	15	17	18	18	15	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	775.1	775.1	775.1	775.1	775.1
2.5°	767.9	775.8	769.8	770.5	771.2
5°	752.1	761.9	760.6	765.9	771.8
7.5°	731.0	741.5	744.8	758.0	767.2
10°	707.3	719.2	725.8	745.5	758.0
12.5°	680.4	694.2	704.7	730.4	748.8
15°	652.1	667.2	681.7	713.9	736.3
17.5°	621.8	636.9	656.0	692.9	719.8
20°	589.6	606.0	629.0	668.5	700.8
22.5°	556.7	573.8	600.1	643.5	680.4
25°	522.4	540.2	568.5	616.5	658.0
27.5°	488.9	505.3	538.2	589.6	635.0
30°	452.7	469.8	504.7	561.3	610.0
32.5°	416.5	433.6	473.7	533.0	584.3
35°	379.0	396.8	438.9	503.4	558.0
37.5°	341.5	359.9	406.6	473.1	531.0
40°	304.0	323.7	373.1	442.8	502.7
42.5°	265.8	286.9	338.9	413.2	475.1
45°	230.3	249.4	306.6	382.9	446.1
47.5°	204.6	215.8	272.4	352.0	418.5
50°	186.2	191.5	239.5	322.4	391.5
52.5°	169.8	173.0	207.3	294.8	361.9
55°	153.3	156.6	179.0	265.8	331.6
57.5°	137.5	139.5	157.9	236.9	301.4
60°	123.0	124.4	142.1	207.9	267.8
62.5°	109.9	110.5	127.0	178.3	234.2
65°	96.7	97.4	113.2	148.7	200.0
67.5°	84.9	84.9	100.0	121.7	167.1
70°	73.0	73.0	85.5	98.7	132.3
72.5°	62.5	63.8	72.4	79.6	103.3
75°	52.0	55.3	59.9	63.2	75.0
77.5°	42.1	46.1	48.0	49.3	50.0
80°	32.9	35.5	36.8	37.5	36.2
82.5°	24.3	26.3	27.0	27.0	25.0
85°	15.1	17.1	18.4	17.8	15.1
87.5°	7.2	9.9	10.5	9.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)