

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: P1175387

Luminaire Tested: S125RDR-S850D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175387  
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-S850D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

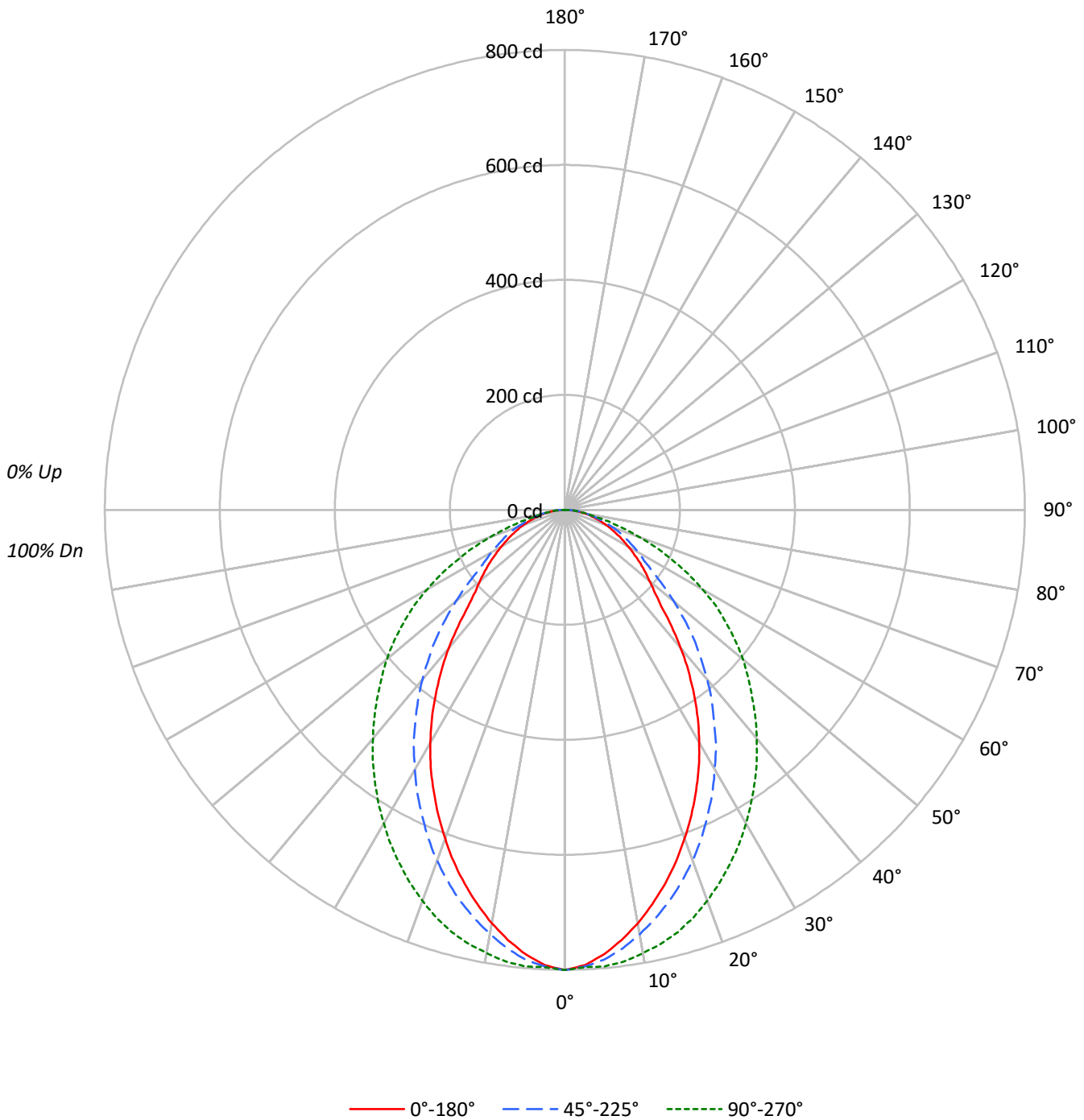
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1507.9 lumens  
Efficiency: N/A  
Efficacy: 58.4 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			100	
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86			86	
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74			74	
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64			64	
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56			56	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50	
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44			44	
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40			40	
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36			36	
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33			33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30			30	

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

	0°	45°	90°
0°	5511	5511	5511
5°	5368	5429	5508
10°	5107	5240	5473
15°	4800	5017	5420
20°	4461	4760	5302
25°	4099	4460	5162
30°	3717	4144	5008
35°	3290	3809	4843
40°	2821	3463	4666
45°	2316	3083	4486
50°	2060	2649	4331
55°	1900	2218	4111
60°	1750	2022	3808
65°	1628	1905	3366
70°	1518	1778	2750
75°	1429	1644	2062
80°	1348	1511	1483
85°	1232	1501	1232

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4486 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.1	4.9
10°-20°	199.7	13.2
20°-30°	274.8	18.2
30°-40°	291.4	19.3
40°-50°	255.1	16.9
50°-60°	195.7	13.0
60°-70°	130.4	8.6
70°-80°	66.8	4.4
80°-90°	19.8	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°	548.6	36.4
0°-40°	840.1	55.7
0°-60°	1290.9	85.6
0°-90°	1507.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1507.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	777	787	786	791	797	73
15°	673	689	704	737	760	189
25°	540	558	587	637	680	248
35°	391	410	453	520	576	244
45°	238	258	317	396	461	188
55°	158	162	185	274	342	142
65°	100	101	117	154	207	100
75°	54	57	62	65	78	57
85°	16	18	19	18	16	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	800.4	800.4	800.4	800.4	800.4
2.5°	792.9	801.1	795.0	795.7	796.3
5°	776.6	786.8	785.5	790.9	797.0
7.5°	754.9	765.8	769.2	782.8	792.3
10°	730.4	742.7	749.5	769.8	782.8
12.5°	702.6	716.8	727.7	754.2	773.2
15°	673.4	689.0	703.9	737.2	760.3
17.5°	642.1	657.7	677.4	715.5	743.3
20°	608.8	625.8	649.6	690.3	723.6
22.5°	574.8	592.5	619.7	664.5	702.6
25°	539.5	557.8	587.1	636.7	679.5
27.5°	504.9	521.8	555.8	608.8	655.7
30°	467.5	485.1	521.2	579.6	629.9
32.5°	430.1	447.8	489.2	550.4	603.4
35°	391.4	409.7	453.2	519.8	576.2
37.5°	352.6	371.7	419.9	488.5	548.3
40°	313.9	334.3	385.3	457.3	519.1
42.5°	274.5	296.3	349.9	426.7	490.6
45°	237.8	257.5	316.6	395.5	460.7
47.5°	211.3	222.9	281.3	363.5	432.1
50°	192.3	197.7	247.3	332.9	404.3
52.5°	175.3	178.7	214.0	304.4	373.7
55°	158.3	161.7	184.8	274.5	342.5
57.5°	142.0	144.0	163.1	244.6	311.2
60°	127.1	128.4	146.8	214.7	276.5
62.5°	113.5	114.2	131.1	184.1	241.9
65°	99.9	100.6	116.9	153.6	206.6
67.5°	87.7	87.7	103.3	125.7	172.6
70°	75.4	75.4	88.3	101.9	136.6
72.5°	64.6	65.9	74.7	82.2	106.7
75°	53.7	57.1	61.8	65.2	77.5
77.5°	43.5	47.6	49.6	51.0	51.6
80°	34.0	36.7	38.1	38.7	37.4
82.5°	25.1	27.2	27.9	27.9	25.8
85°	15.6	17.7	19.0	18.3	15.6
87.5°	7.5	10.2	10.9	9.5	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)