

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061800

Luminaire Tested: S125RDRP-S850D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061800  
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: S125RDRP-S850D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

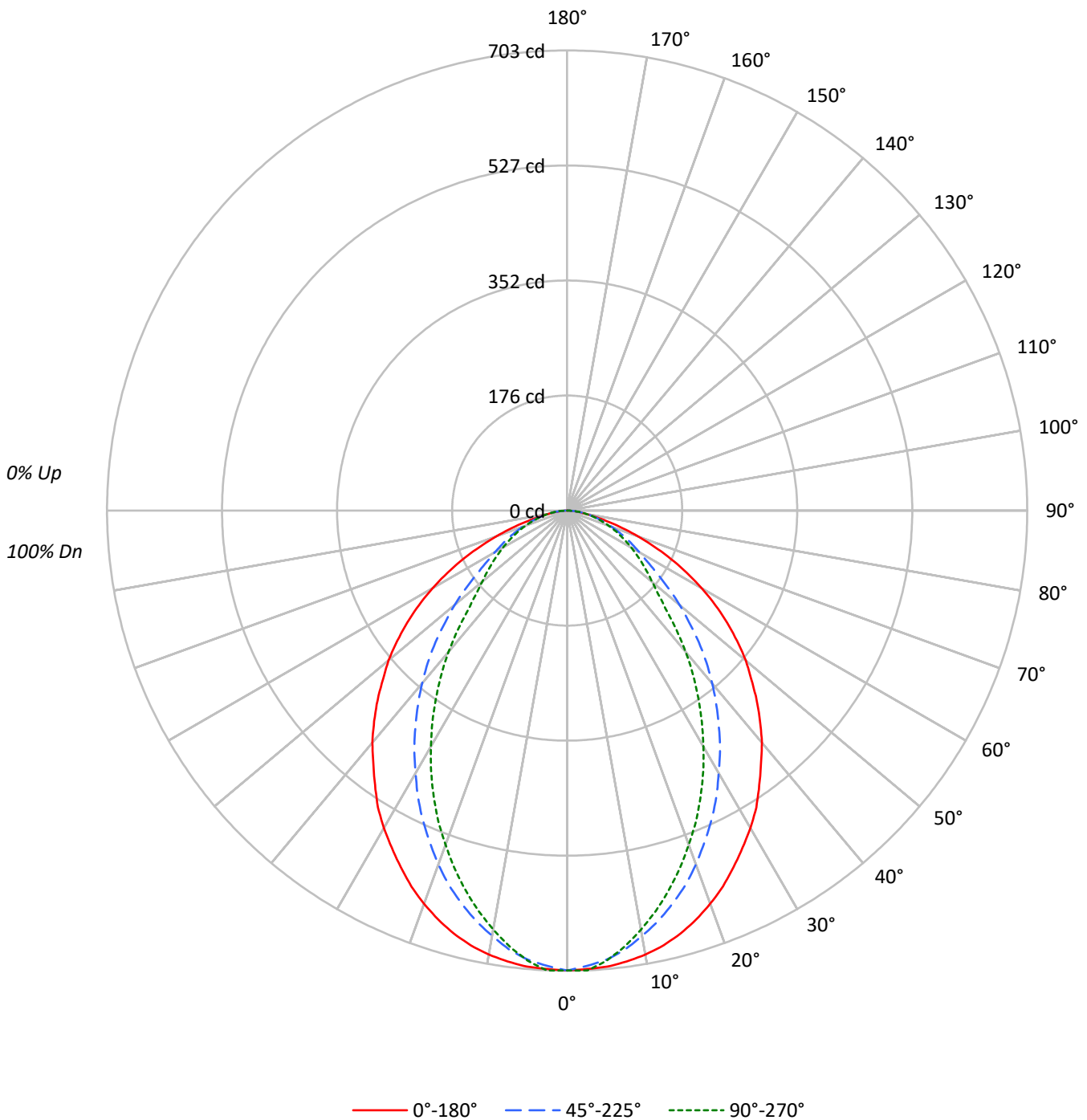
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1330.8 lumens  
Efficiency: N/A  
Efficacy: 51.6 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 (A<sub>in</sub>): 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	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	108	104	100	97	100	97	94	96	93	91	92	90	89	87					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75					75			
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65					65			
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57					57			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50					50			
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45					45			
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40					40			
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36					36			
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33					33			
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30					30			

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

	0°	45°	90°
0°	4837	4837	4837
5°	4835	4761	4771
10°	4816	4613	4544
15°	4769	4432	4279
20°	4683	4214	3979
25°	4567	3963	3663
30°	4451	3681	3311
35°	4302	3398	2936
40°	4161	3099	2530
45°	3988	2770	2072
50°	3815	2403	1813
55°	3580	2005	1676
60°	3266	1754	1566
65°	2858	1603	1453
70°	2319	1443	1351
75°	1663	1319	1258
80°	1150	1178	1178
85°	845	1027	1082

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3988 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.3	4.9
10°-20°	176.7	13.3
20°-30°	244.2	18.3
30°-40°	260.1	19.5
40°-50°	228.5	17.2
50°-60°	173.3	13.0
60°-70°	112.5	8.5
70°-80°	55.7	4.2
80°-90°	14.6	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°	486.2	36.5
0°-40°	746.3	56.1
0°-60°	1148.0	86.3
0°-90°	1330.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1330.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	700	698	689	691	690	66
15°	669	654	622	607	600	188
25°	601	568	522	495	482	277
35°	512	464	404	368	349	320
45°	410	352	284	233	213	316
55°	298	240	167	144	140	266
65°	175	130	98	91	89	173
75°	62	55	50	48	47	70
85°	11	12	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°	702.5	702.5	702.5	702.5	702.5
2.5°	701.0	702.5	696.4	701.8	703.3
5°	699.5	697.9	688.8	691.1	690.3
7.5°	694.9	691.8	676.6	675.1	672.0
10°	688.8	681.2	659.8	654.5	649.9
12.5°	680.4	668.2	642.3	631.6	626.2
15°	669.0	653.7	621.7	607.2	600.3
17.5°	655.2	633.9	600.3	580.5	572.8
20°	639.2	614.0	575.1	552.2	543.1
22.5°	621.7	591.9	548.4	524.0	514.1
25°	601.1	568.3	521.7	495.0	482.1
27.5°	580.5	543.9	493.5	463.8	450.0
30°	559.9	517.9	463.0	431.0	416.5
32.5°	537.8	491.2	434.8	399.7	382.9
35°	511.8	464.5	404.3	367.7	349.3
37.5°	486.6	436.3	374.5	333.3	315.8
40°	463.0	409.6	344.8	299.8	281.5
42.5°	436.3	381.4	315.0	267.7	247.1
45°	409.6	352.4	284.5	233.4	212.8
47.5°	381.4	324.9	252.5	202.1	188.4
50°	356.2	296.7	224.3	178.5	169.3
52.5°	327.2	269.3	195.3	160.2	154.1
55°	298.2	239.5	167.0	144.2	139.6
57.5°	268.5	212.8	144.9	130.4	125.9
60°	237.2	185.4	127.4	115.9	113.7
62.5°	205.9	157.1	112.1	103.7	100.7
65°	175.4	130.4	98.4	90.8	89.2
67.5°	144.2	106.0	84.7	79.3	78.6
70°	115.2	86.2	71.7	68.6	67.1
72.5°	88.5	68.6	60.3	58.0	57.2
75°	62.5	54.9	49.6	48.1	47.3
77.5°	42.0	42.0	39.7	38.1	38.9
80°	29.0	30.5	29.7	29.7	29.7
82.5°	19.1	20.6	21.4	21.4	21.4
85°	10.7	12.2	13.0	13.0	13.7
87.5°	3.8	4.6	5.3	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.03	17.52	16.39	17.83	18.15	12.27	13.76	12.64	14.08	14.39
	3H	17.34	18.68	17.72	19.01	19.37	13.85	15.19	14.23	15.52	15.88
	4H	17.71	18.96	18.11	19.31	19.69	14.46	15.71	14.86	16.06	16.44
	6H	17.89	19.04	18.30	19.41	19.80	14.93	16.08	15.34	16.45	16.84
	8H	17.92	19.02	18.35	19.41	19.82	15.09	16.19	15.51	16.58	16.98
	12H	17.94	18.99	18.37	19.37	19.80	15.20	16.25	15.63	16.63	17.06
4H	2H	16.14	17.39	16.54	17.74	18.12	12.93	14.18	13.33	14.53	14.91
	3H	17.63	18.67	18.04	19.07	19.47	14.71	15.75	15.12	16.15	16.55
	4H	18.10	19.04	18.54	19.45	19.89	15.43	16.37	15.87	16.78	17.22
	6H	18.39	19.20	18.85	19.64	20.10	16.02	16.83	16.48	17.27	17.73
	8H	18.46	19.22	18.92	19.66	20.13	16.23	16.98	16.69	17.43	17.90
	12H	18.50	19.18	18.98	19.65	20.13	16.38	17.06	16.86	17.54	18.01
8H	4H	18.19	18.94	18.65	19.39	19.86	15.74	16.50	16.21	16.95	17.41
	6H	18.55	19.18	19.05	19.67	20.15	16.45	17.07	16.95	17.57	18.04
	8H	18.67	19.23	19.18	19.74	20.23	16.73	17.29	17.24	17.80	18.29
	12H	18.75	19.25	19.26	19.74	20.31	16.96	17.45	17.47	17.95	18.51
12H	4H	18.18	18.86	18.66	19.34	19.81	15.77	16.44	16.25	16.92	17.40
	6H	18.55	19.12	19.07	19.63	20.11	16.50	17.06	17.01	17.57	18.06
	8H	18.71	19.21	19.22	19.70	20.27	16.84	17.33	17.35	17.82	18.39