

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: P1175387

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

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2024  
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: S125RDRP-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: -

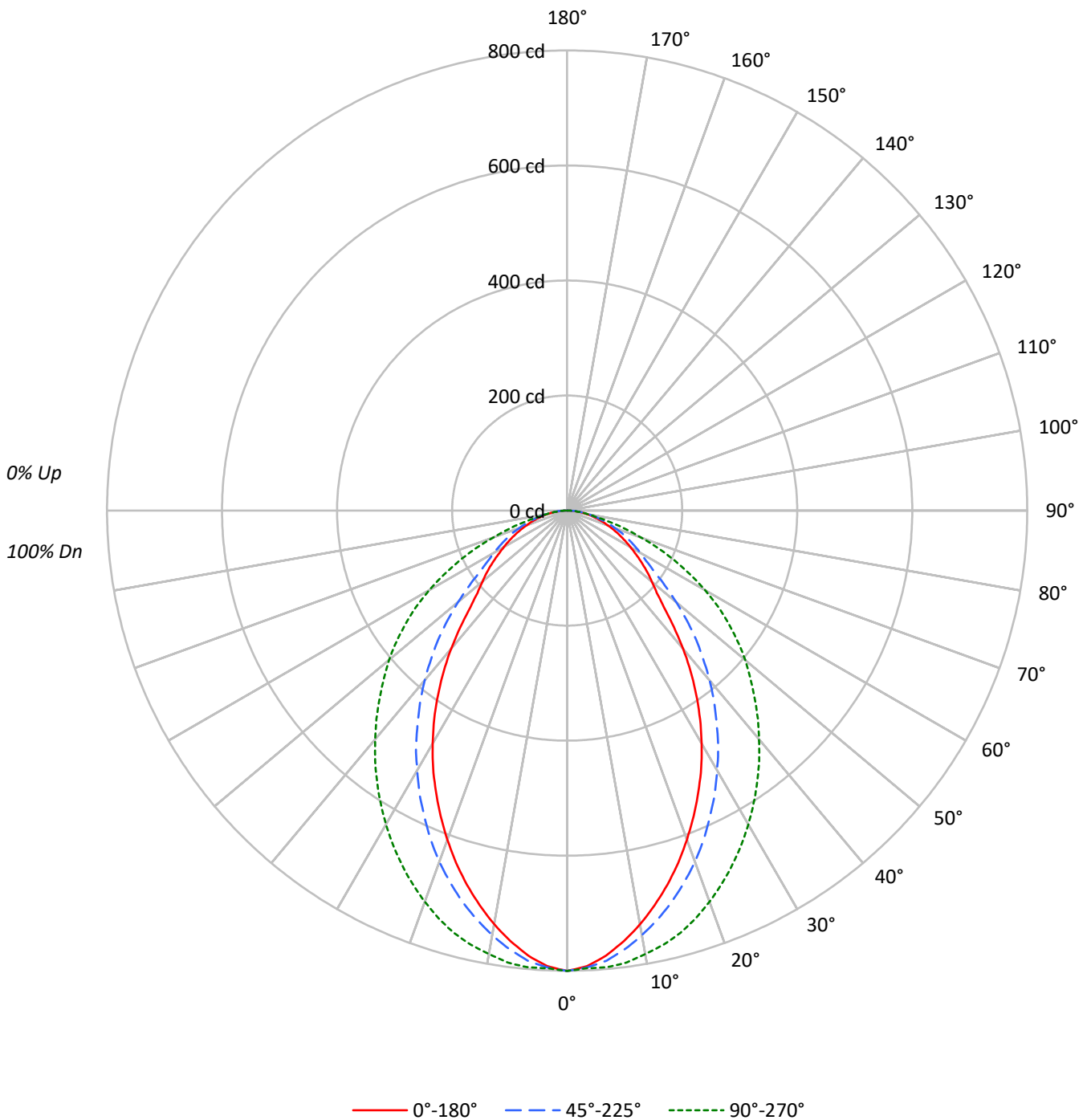
**Summary**

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 (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	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



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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	12.54	14.04	12.91	14.36	14.67	16.57	18.07	16.94	18.38	18.70
	3H	14.13	15.48	14.51	15.80	16.17	17.96	19.30	18.34	19.63	19.99
	4H	14.78	16.04	15.18	16.39	16.76	18.36	19.62	18.76	19.97	20.35
	6H	15.29	16.45	15.70	16.82	17.21	18.57	19.73	18.98	20.10	20.49
	8H	15.47	16.57	15.89	16.96	17.37	18.63	19.73	19.05	20.12	20.53
	12H	15.59	16.65	16.02	17.03	17.46	18.66	19.72	19.09	20.10	20.53
4H	2H	13.31	14.57	13.71	14.92	15.30	16.70	17.96	17.10	18.31	18.69
	3H	15.10	16.14	15.51	16.54	16.94	18.27	19.32	18.68	19.72	20.12
	4H	15.86	16.81	16.30	17.22	17.66	18.78	19.72	19.21	20.14	20.58
	6H	16.51	17.32	16.96	17.77	18.23	19.11	19.92	19.56	20.37	20.83
	8H	16.73	17.50	17.20	17.94	18.41	19.21	19.97	19.67	20.42	20.88
	12H	16.91	17.59	17.39	18.07	18.54	19.28	19.96	19.76	20.44	20.91
8H	4H	16.25	17.01	16.71	17.46	17.93	18.88	19.65	19.34	20.09	20.56
	6H	17.03	17.66	17.52	18.15	18.63	19.30	19.93	19.80	20.42	20.90
	8H	17.34	17.91	17.86	18.42	18.91	19.46	20.03	19.97	20.54	21.02
	12H	17.60	18.11	18.11	18.60	19.16	19.60	20.10	20.11	20.59	21.15
12H	4H	16.29	16.97	16.77	17.45	17.92	18.88	19.56	19.36	20.04	20.51
	6H	17.10	17.67	17.62	18.18	18.67	19.31	19.88	19.83	20.39	20.88
	8H	17.49	17.99	18.00	18.48	19.04	19.52	20.02	20.03	20.52	21.08