

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: P1062202

Luminaire Tested: S125RDRP-H850D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1062202  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H850D927-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

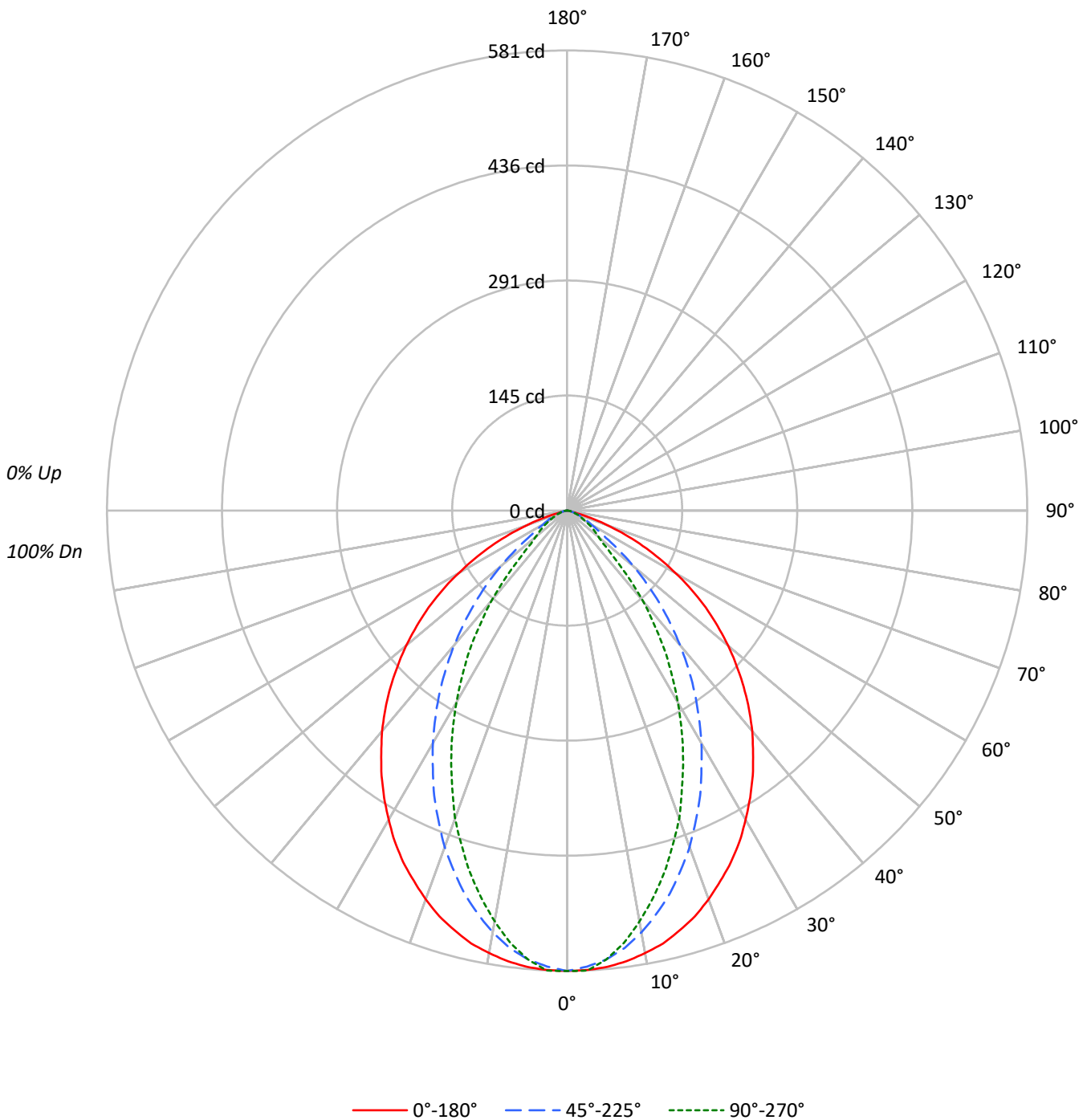
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 840.7 lumens  
Efficiency: N/A  
Efficacy: 35.8 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
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 (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	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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	4002	4002	4002
5°	3998	3931	3931
10°	3966	3780	3682
15°	3912	3570	3375
20°	3826	3313	3031
25°	3720	3019	2632
30°	3582	2695	2220
35°	3434	2359	1800
40°	3266	1992	1335
45°	3071	1597	805
50°	2841	1171	554
55°	2563	718	461
60°	2177	489	366
65°	1720	373	288
70°	1085	268	238
75°	354	197	197
80°	119	147	174
85°	55	118	118

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3071 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.8	6.4
10°-20°	142.0	16.9
20°-30°	186.8	22.2
30°-40°	183.5	21.8
40°-50°	138.8	16.5
50°-60°	84.2	10.0
60°-70°	39.7	4.7
70°-80°	10.4	1.2
80°-90°	1.6	0.2
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°	382.5	45.5
0°-40°	566.0	67.3
0°-60°	789.1	93.9
0°-90°	840.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	581	581	581	581	581	
5°	578	577	569	570	569	55
15°	549	534	501	482	474	155
25°	490	453	397	360	346	225
35°	408	354	281	231	214	255
45°	315	248	164	104	83	243
55°	214	146	60	41	38	190
65°	106	54	23	19	18	104
75°	13	9	7	7	7	21
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	581.3	581.3	581.3	581.3	581.3
2.5°	580.6	580.6	576.2	581.3	581.3
5°	578.4	576.9	568.8	569.5	568.8
7.5°	573.9	571.0	557.0	553.3	550.3
10°	567.3	561.4	540.7	531.8	526.7
12.5°	559.9	549.6	521.5	508.9	500.8
15°	548.8	534.1	500.8	481.6	473.5
17.5°	537.0	515.6	476.4	453.5	443.2
20°	522.2	497.1	452.1	424.0	413.7
22.5°	506.0	476.4	424.0	393.0	378.9
25°	489.7	452.8	397.4	360.5	346.4
27.5°	471.3	429.2	367.1	328.7	313.2
30°	450.6	405.5	339.0	299.2	279.2
32.5°	429.9	381.2	309.5	265.9	246.0
35°	408.5	353.8	280.7	231.2	214.2
37.5°	385.6	328.0	251.1	199.4	179.5
40°	363.4	302.1	221.6	166.9	148.5
42.5°	339.8	276.3	192.1	135.2	114.5
45°	315.4	248.2	164.0	104.2	82.7
47.5°	290.3	223.1	135.9	76.8	62.0
50°	265.2	196.5	109.3	56.9	51.7
52.5°	239.3	170.6	82.7	47.3	45.1
55°	213.5	146.3	59.8	40.6	38.4
57.5°	186.9	119.7	45.1	34.7	32.5
60°	158.1	96.0	35.5	28.8	26.6
62.5°	131.5	75.3	28.8	23.6	22.2
65°	105.6	53.9	22.9	19.2	17.7
67.5°	79.0	36.2	17.7	14.8	14.8
70°	53.9	23.6	13.3	11.8	11.8
72.5°	32.5	14.0	9.6	9.6	9.6
75°	13.3	8.9	7.4	7.4	7.4
77.5°	4.4	5.2	5.2	5.9	5.9
80°	3.0	3.0	3.7	4.4	4.4
82.5°	1.5	2.2	2.2	3.0	3.0
85°	0.7	0.7	1.5	1.5	1.5
87.5°	0.0	0.0	0.0	0.7	0.7
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	14.15	15.48	14.51	15.79	16.11	4.80	6.13	5.17	6.44	6.76
	3H	14.85	16.03	15.23	16.36	16.73	5.58	6.76	5.96	7.09	7.46
	4H	14.87	15.97	15.27	16.32	16.70	5.83	6.93	6.24	7.28	7.66
	6H	14.80	15.81	15.22	16.18	16.57	6.01	7.02	6.42	7.39	7.78
	8H	14.76	15.71	15.19	16.10	16.51	6.06	7.01	6.49	7.40	7.80
	12H	14.72	15.63	15.15	16.01	16.44	6.07	6.97	6.50	7.36	7.79
4H	2H	13.98	15.08	14.38	15.43	15.81	5.29	6.38	5.69	6.73	7.12
	3H	14.73	15.62	15.14	16.02	16.42	6.20	7.09	6.61	7.49	7.90
	4H	14.74	15.54	15.18	15.96	16.40	6.51	7.31	6.95	7.72	8.17
	6H	14.68	15.37	15.15	15.81	16.28	6.77	7.45	7.23	7.90	8.37
	8H	14.63	15.27	15.10	15.72	16.19	6.84	7.47	7.31	7.92	8.39
	12H	14.59	15.15	15.07	15.63	16.11	6.86	7.43	7.35	7.91	8.38
8H	4H	14.63	15.26	15.10	15.71	16.18	6.62	7.26	7.09	7.71	8.18
	6H	14.55	15.07	15.05	15.57	16.05	6.94	7.46	7.44	7.96	8.44
	8H	14.50	14.96	15.02	15.48	15.97	7.05	7.51	7.57	8.03	8.52
	12H	14.46	14.87	14.97	15.36	15.93	7.11	7.52	7.63	8.02	8.59
12H	4H	14.58	15.15	15.07	15.63	16.10	6.60	7.16	7.08	7.64	8.12
	6H	14.49	14.96	15.02	15.48	15.97	6.91	7.38	7.43	7.89	8.38
	8H	14.46	14.87	14.97	15.37	15.94	7.05	7.46	7.57	7.96	8.53