

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: P1061696

Luminaire Tested: S125RDRP-S610D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061696  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S610D840-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

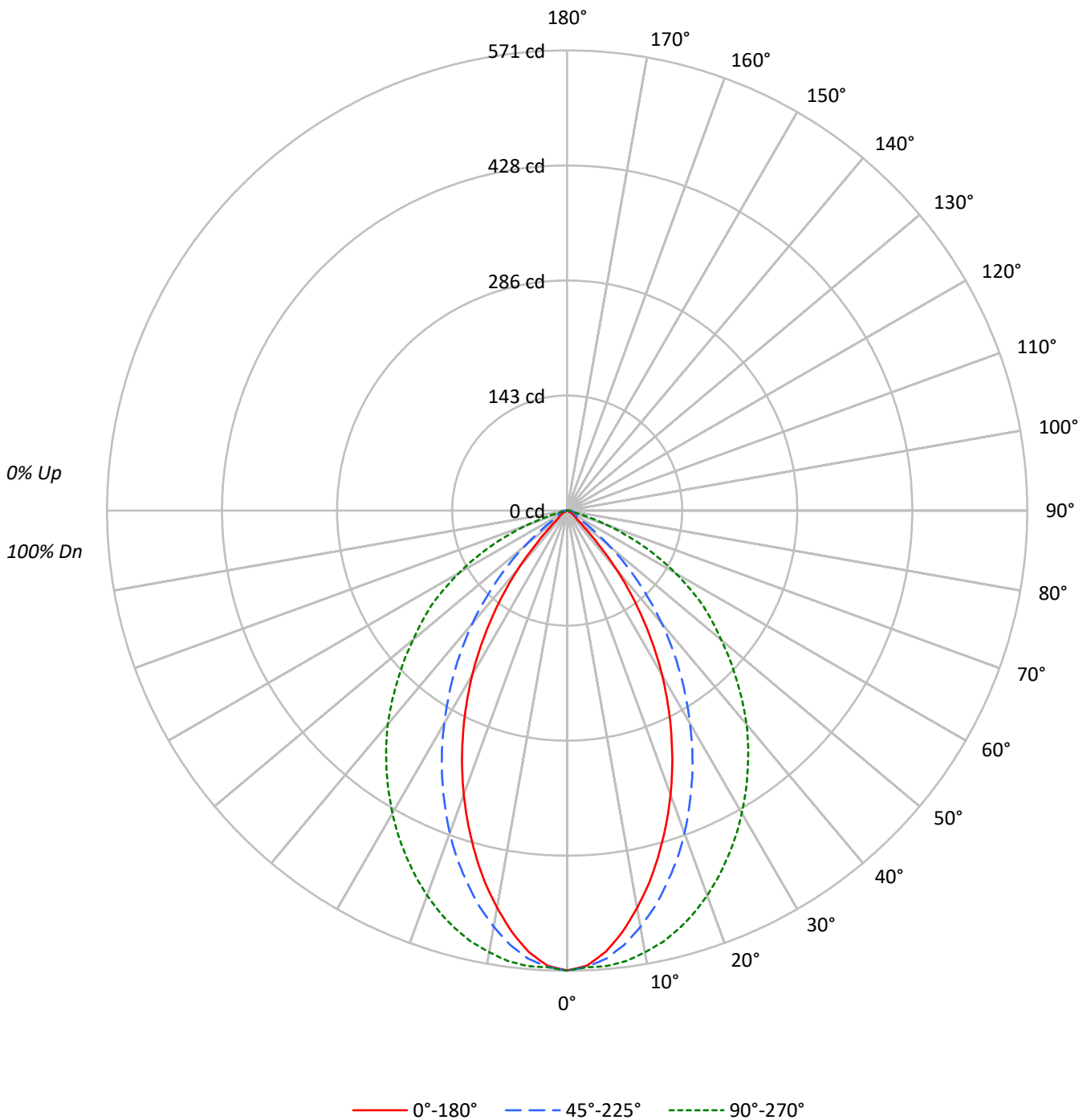
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 734.0 lumens  
Efficiency: N/A  
Efficacy: 37.4 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65					65			
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59					59			
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54					54			
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49					49			
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42					42			
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39					39			

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

	0°	45°	90°
0°	3929	3929	3929
5°	3799	3857	3920
10°	3499	3666	3891
15°	3141	3412	3827
20°	2750	3121	3723
25°	2322	2787	3593
30°	1872	2425	3447
35°	1377	2044	3285
40°	859	1648	3114
45°	321	1204	2895
50°	151	753	2673
55°	109	312	2472
60°	77	164	2139
65°	46	194	1694
70°	42	225	1075
75°	56	223	338
80°	83	278	250
85°	166	442	332

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2895 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.3	7.1
10°-20°	135.5	18.5
20°-30°	172.6	23.5
30°-40°	160.6	21.9
40°-50°	110.1	15.0
50°-60°	60.6	8.3
60°-70°	28.7	3.9
70°-80°	9.0	1.2
80°-90°	4.6	0.6
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°	360.4	49.1
0°-40°	521.0	71.0
0°-60°	691.7	94.2
0°-90°	734.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	734.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	550	557	558	562	567	51
15°	441	455	479	514	537	123
25°	306	325	367	426	473	140
35°	164	187	243	323	391	102
45°	33	56	124	219	297	31
55°	9	10	26	122	206	8
65°	3	4	12	45	104	3
75°	2	4	8	9	13	2
85°	2	5	6	5	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	570.7	570.7	570.7	570.7	570.7
2.5°	565.1	570.7	566.5	566.5	567.2
5°	549.6	556.6	558.0	562.2	567.2
7.5°	527.1	536.2	543.3	555.2	563.7
10°	500.4	511.6	524.3	544.0	556.6
12.5°	472.3	484.2	503.2	530.6	548.2
15°	440.7	454.7	478.6	514.5	536.9
17.5°	408.3	423.8	453.3	495.5	523.6
20°	375.3	391.5	425.9	473.0	508.1
22.5°	340.9	358.4	396.4	449.8	491.3
25°	305.7	324.7	366.9	425.9	473.0
27.5°	270.6	290.3	336.6	401.3	454.0
30°	235.4	255.8	305.0	376.0	433.6
32.5°	199.6	222.1	274.1	350.7	412.5
35°	163.8	186.9	243.2	323.3	390.8
37.5°	128.6	152.5	213.0	297.3	369.0
40°	95.6	119.5	183.4	271.3	346.5
42.5°	61.8	87.1	152.5	244.6	321.9
45°	33.0	55.5	123.7	219.3	297.3
47.5°	17.6	29.5	96.3	194.0	274.1
50°	14.1	16.2	70.3	168.7	249.5
52.5°	11.2	12.7	45.0	142.7	227.7
55°	9.1	10.5	26.0	122.3	205.9
57.5°	7.0	8.4	14.8	101.9	180.6
60°	5.6	6.3	11.9	81.5	155.3
62.5°	3.5	4.9	11.9	63.3	130.0
65°	2.8	3.5	11.9	45.0	104.0
67.5°	2.8	2.8	11.9	29.5	78.0
70°	2.1	2.1	11.2	19.0	53.4
72.5°	2.1	2.1	9.8	12.7	30.9
75°	2.1	3.5	8.4	9.1	12.7
77.5°	2.1	5.6	7.7	7.7	7.0
80°	2.1	5.6	7.0	6.3	6.3
82.5°	2.1	5.6	5.6	5.6	4.9
85°	2.1	4.9	5.6	4.9	4.2
87.5°	2.1	4.9	4.9	4.9	2.8
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	0.00	0.00	0.00	0.00	0.00	13.80	15.08	14.16	15.40	15.71
	3H	0.00	0.00	0.00	0.00	0.00	14.59	15.72	14.97	16.05	16.42
	4H	0.00	0.00	0.00	0.00	0.00	14.61	15.67	15.02	16.02	16.41
	6H	0.00	0.00	0.00	0.00	0.00	14.57	15.54	14.98	15.91	16.30
	8H	0.00	0.00	0.00	0.00	0.00	14.55	15.46	14.98	15.86	16.26
	12H	0.00	0.00	0.00	0.15	0.58	14.53	15.40	14.96	15.79	16.22
4H	2H	0.00	0.00	0.00	0.00	0.00	13.58	14.64	13.99	14.99	15.38
	3H	0.00	0.00	0.00	0.00	0.10	14.41	15.27	14.82	15.68	16.08
	4H	0.00	0.00	0.00	0.21	0.66	14.44	15.22	14.88	15.64	16.08
	6H	0.52	1.18	0.98	1.63	2.10	14.43	15.10	14.90	15.54	16.01
	8H	1.26	1.88	1.73	2.33	2.80	14.41	15.03	14.88	15.48	15.95
	12H	2.00	2.55	2.49	3.03	3.51	14.42	14.96	14.90	15.45	15.92
8H	4H	1.07	1.69	1.54	2.13	2.61	14.33	14.95	14.80	15.40	15.87
	6H	2.81	3.32	3.31	3.81	4.30	14.33	14.84	14.83	15.33	15.82
	8H	3.76	4.22	4.29	4.73	5.22	14.34	14.79	14.86	15.31	15.80
	12H	4.70	5.10	5.21	5.59	6.16	14.38	14.78	14.90	15.28	15.85
12H	4H	1.37	1.91	1.86	2.40	2.87	14.29	14.83	14.78	15.32	15.79
	6H	3.27	3.72	3.79	4.24	4.73	14.29	14.74	14.81	15.26	15.75
	8H	4.40	4.80	4.92	5.30	5.87	14.32	14.73	14.84	15.22	15.79