

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



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: P1062123

Luminaire Tested: S125RDR-H610D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062123  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H610D927-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

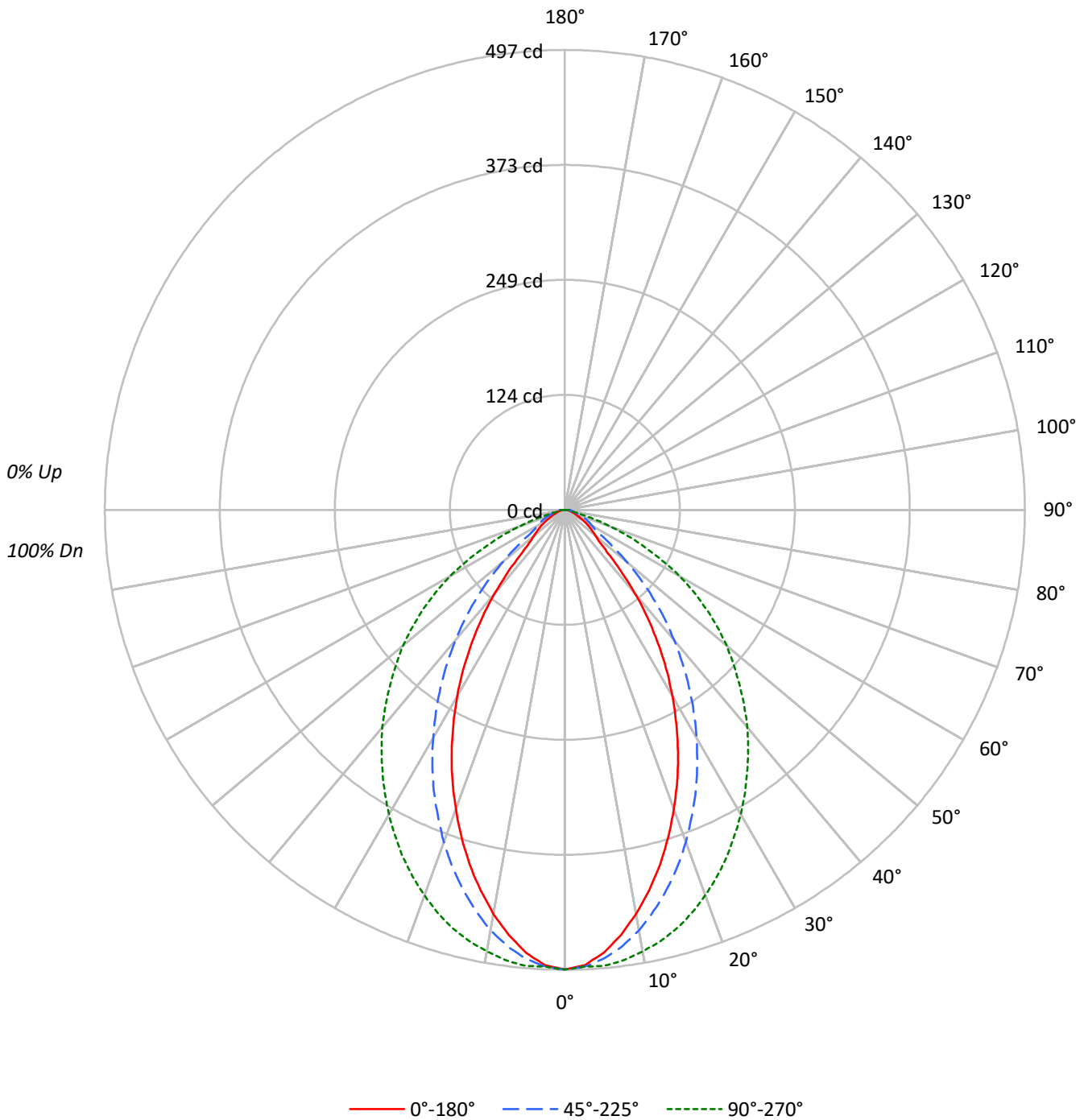
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 719.5 lumens  
Efficiency: N/A  
Efficacy: 41.4 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.4  
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

TEST NUMBER: P1062123

CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-SVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1062123

CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-SVL-W

**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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

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

	0°	45°	90°
0°	3420	3420	3420
5°	3320	3364	3418
10°	3100	3226	3388
15°	2830	3029	3337
20°	2522	2800	3249
25°	2198	2543	3144
30°	1847	2262	3022
35°	1468	1966	2889
40°	1058	1651	2757
45°	627	1311	2596
50°	464	933	2442
55°	393	576	2236
60°	319	465	1971
65°	249	430	1556
70°	213	372	1041
75°	197	322	420
80°	210	333	293
85°	253	498	332

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2596 cd/sqm



TEST NUMBER: P1062123

CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-SVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.8	6.4
10°-20°	120.2	16.7
20°-30°	157.2	21.8
30°-40°	153.1	21.3
40°-50°	114.8	16.0
50°-60°	72.0	10.0
60°-70°	37.5	5.2
70°-80°	13.6	1.9
80°-90°	5.4	0.7
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°	323.2	44.9
0°-40°	476.3	66.2
0°-60°	663.1	92.2
0°-90°	719.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	719.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	497	497	497	497	497	
5°	480	487	487	490	495	45
15°	397	409	425	451	468	111
25°	289	305	335	380	414	132
35°	175	193	234	296	344	109
45°	64	83	135	208	267	54
55°	33	34	48	126	186	29
65°	15	16	26	51	96	16
75°	7	10	12	13	16	8
85°	3	5	6	6	4	3
90°	0	0	0	0	0	



TEST NUMBER: P1062123

CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-SVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	496.7	496.7	496.7	496.7	496.7
2.5°	492.5	497.3	494.1	494.1	494.1
5°	480.4	486.7	486.7	490.4	494.6
7.5°	463.5	470.9	475.6	484.6	490.9
10°	443.4	452.4	461.4	476.2	484.6
12.5°	420.7	431.3	443.9	464.5	477.2
15°	397.0	408.6	424.9	451.3	468.2
17.5°	371.1	384.8	404.4	436.0	456.6
20°	344.2	357.9	382.2	418.1	443.4
22.5°	317.3	332.0	358.4	399.1	429.2
25°	289.3	305.1	334.7	380.1	413.9
27.5°	260.8	277.1	309.9	360.5	397.0
30°	232.3	249.2	284.5	339.4	380.1
32.5°	203.8	221.7	259.2	317.8	362.1
35°	174.7	193.2	233.9	296.1	343.7
37.5°	146.8	165.2	208.5	274.0	325.2
40°	117.7	137.8	183.7	251.8	306.7
42.5°	89.2	109.8	158.9	229.6	286.6
45°	64.4	83.4	134.6	208.0	266.6
47.5°	49.6	60.2	109.8	185.8	247.0
50°	43.3	46.5	87.1	165.2	228.0
52.5°	37.5	39.6	65.5	146.2	207.5
55°	32.7	34.3	48.0	125.6	186.3
57.5°	27.4	29.6	38.0	105.6	164.7
60°	23.2	24.3	33.8	87.1	143.1
62.5°	19.0	20.1	30.1	68.6	118.8
65°	15.3	16.4	26.4	50.7	95.5
67.5°	12.7	13.2	22.2	35.9	73.4
70°	10.6	11.1	18.5	24.8	51.7
72.5°	9.0	10.6	14.8	17.9	32.7
75°	7.4	10.0	12.1	12.7	15.8
77.5°	6.3	9.5	10.0	10.0	9.0
80°	5.3	7.9	8.4	7.9	7.4
82.5°	4.2	6.3	6.9	6.9	5.8
85°	3.2	5.3	6.3	5.8	4.2
87.5°	2.1	4.8	5.3	4.8	3.2
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1062123  
 CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-SVL-W

**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	4.20	5.55	4.56	5.86	6.18	13.80	15.16	14.17	15.47	15.78
	3H	5.06	6.26	5.43	6.59	6.95	14.64	15.84	15.02	16.17	16.54
	4H	5.48	6.60	5.88	6.95	7.33	14.72	15.84	15.12	16.19	16.57
	6H	5.90	6.93	6.32	7.30	7.70	14.70	15.73	15.12	16.10	16.49
	8H	6.08	7.06	6.51	7.45	7.85	14.69	15.66	15.12	16.05	16.46
	12H	6.24	7.18	6.68	7.56	7.99	14.68	15.61	15.11	15.99	16.42
4H	2H	5.16	6.28	5.56	6.63	7.01	13.67	14.79	14.07	15.14	15.52
	3H	6.21	7.13	6.62	7.53	7.94	14.58	15.49	14.99	15.90	16.30
	4H	6.77	7.59	7.21	8.01	8.45	14.68	15.50	15.11	15.92	16.36
	6H	7.37	8.08	7.83	8.52	8.99	14.71	15.41	15.17	15.86	16.33
	8H	7.61	8.27	8.07	8.71	9.18	14.71	15.37	15.18	15.81	16.29
	12H	7.83	8.42	8.32	8.90	9.37	14.72	15.30	15.21	15.79	16.26
8H	4H	7.24	7.90	7.71	8.35	8.82	14.60	15.26	15.07	15.71	16.18
	6H	8.05	8.59	8.55	9.09	9.57	14.66	15.20	15.16	15.69	16.18
	8H	8.43	8.91	8.95	9.43	9.92	14.69	15.18	15.21	15.69	16.18
	12H	8.82	9.25	9.34	9.75	10.32	14.75	15.18	15.27	15.68	16.25
12H	4H	7.29	7.88	7.78	8.36	8.83	14.57	15.15	15.06	15.64	16.11
	6H	8.17	8.66	8.69	9.17	9.67	14.62	15.11	15.14	15.63	16.12
	8H	8.66	9.09	9.17	9.58	10.15	14.70	15.13	15.21	15.62	16.19