

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: P1062122

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062122
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
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-S
Description: DEFINE 5 SILVER 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

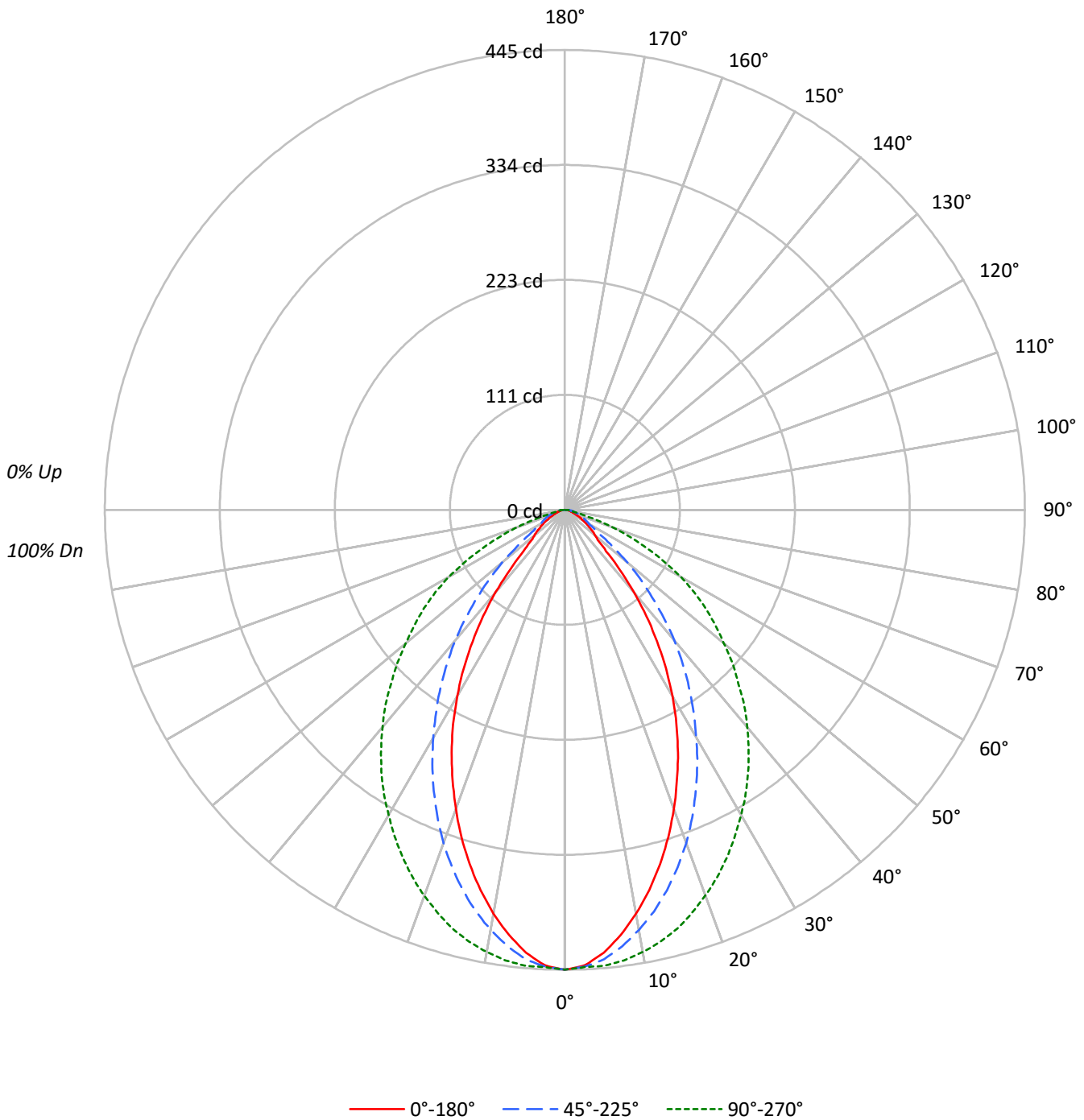
Lumens per Lamp: N/A
Luminaire Lumens: 642.5 lumens
Efficiency: N/A
Efficacy: 36.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1062122

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

Luminous Intensity Polar Plot





TEST NUMBER: P1062122

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

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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3063	3063	3063
5°	2973	3017	3060
10°	2775	2885	3037
15°	2532	2717	2991
20°	2258	2514	2912
25°	1968	2278	2818
30°	1654	2023	2711
35°	1305	1761	2600
40°	935	1480	2467
45°	550	1162	2313
50°	407	837	2149
55°	342	507	1996
60°	277	370	1781
65°	215	352	1427
70°	181	330	966
75°	168	295	420
80°	167	293	274
85°	205	379	292

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2313 cd/sqm



TEST NUMBER: P1062122

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.0	6.4
10°-20°	107.7	16.8
20°-30°	140.7	21.9
30°-40°	137.0	21.3
40°-50°	102.4	15.9
50°-60°	63.5	9.9
60°-70°	33.4	5.2
70°-80°	12.2	1.9
80°-90°	4.6	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°	289.4	45.1
0°-40°	426.4	66.4
0°-60°	592.4	92.2
0°-90°	642.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	642.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	445	445	445	445	445	
5°	430	436	436	439	443	40
15°	355	366	381	404	420	99
25°	259	272	300	340	371	118
35°	155	172	210	266	309	97
45°	56	74	119	186	238	48
55°	28	30	42	110	166	26
65°	13	14	22	46	88	14
75°	6	7	11	12	16	7
85°	3	5	5	5	4	3
90°	0	0	0	0	0	



TEST NUMBER: P1062122

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	444.9	444.9	444.9	444.9	444.9
2.5°	441.2	444.9	442.3	442.3	442.8
5°	430.2	436.0	436.5	439.1	442.8
7.5°	414.8	421.7	425.9	433.8	439.7
10°	396.9	404.8	412.7	425.9	434.4
12.5°	376.8	386.3	398.0	415.9	428.0
15°	355.2	365.8	381.1	404.3	419.6
17.5°	332.5	343.6	362.6	390.6	409.0
20°	308.2	320.4	343.1	374.7	397.4
22.5°	283.4	297.1	322.0	357.8	384.8
25°	259.1	272.3	299.8	340.4	371.0
27.5°	233.8	247.5	277.6	322.5	356.3
30°	208.0	222.7	254.4	304.0	341.0
32.5°	182.1	197.4	231.7	285.0	325.7
35°	155.2	172.1	209.5	265.5	309.3
37.5°	129.8	147.8	186.8	245.4	291.9
40°	104.0	122.4	164.7	225.9	274.5
42.5°	78.6	97.6	142.0	205.8	257.0
45°	56.5	73.9	119.3	186.3	237.5
47.5°	43.3	53.3	98.2	166.3	220.1
50°	38.0	41.2	78.1	146.7	200.6
52.5°	33.3	35.4	58.1	127.7	183.7
55°	28.5	30.1	42.2	109.8	166.3
57.5°	24.3	25.9	32.2	93.4	148.3
60°	20.1	21.6	26.9	77.1	129.3
62.5°	16.9	17.4	24.3	61.8	108.2
65°	13.2	14.3	21.6	46.4	87.6
67.5°	11.1	11.6	19.0	33.3	67.6
70°	9.0	9.5	16.4	23.2	48.0
72.5°	7.9	7.9	13.7	16.9	30.6
75°	6.3	7.4	11.1	12.1	15.8
77.5°	5.3	7.4	9.5	9.0	8.4
80°	4.2	6.9	7.4	7.4	6.9
82.5°	3.7	5.8	6.3	5.8	5.3
85°	2.6	4.8	4.8	4.8	3.7
87.5°	2.1	4.2	3.7	3.7	2.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1062122
 CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-SVL-S

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	3.68	5.03	4.05	5.35	5.66	13.38	14.73	13.74	15.04	15.36
	3H	4.52	5.72	4.90	6.05	6.41	14.29	15.49	14.67	15.82	16.18
	4H	4.88	6.00	5.28	6.35	6.73	14.39	15.51	14.79	15.86	16.24
	6H	5.25	6.28	5.67	6.65	7.04	14.38	15.40	14.79	15.77	16.17
	8H	5.43	6.41	5.86	6.80	7.20	14.36	15.34	14.79	15.73	16.13
	12H	5.59	6.52	6.03	6.91	7.34	14.35	15.28	14.78	15.66	16.09
4H	2H	4.51	5.63	4.91	5.98	6.36	13.23	14.35	13.63	14.70	15.08
	3H	5.57	6.48	5.98	6.88	7.29	14.22	15.13	14.63	15.54	15.94
	4H	6.02	6.84	6.45	7.26	7.70	14.35	15.17	14.78	15.58	16.03
	6H	6.58	7.29	7.04	7.73	8.20	14.38	15.09	14.84	15.53	16.00
	8H	6.84	7.50	7.31	7.95	8.42	14.38	15.04	14.85	15.49	15.96
	12H	7.08	7.66	7.57	8.15	8.62	14.39	14.97	14.88	15.46	15.93
8H	4H	6.58	7.23	7.04	7.68	8.15	14.27	14.93	14.74	15.38	15.85
	6H	7.36	7.90	7.86	8.39	8.87	14.33	14.87	14.83	15.37	15.85
	8H	7.77	8.26	8.29	8.77	9.26	14.36	14.85	14.88	15.36	15.85
	12H	8.19	8.62	8.70	9.11	9.68	14.42	14.85	14.93	15.34	15.91
12H	4H	6.64	7.22	7.12	7.70	8.18	14.24	14.82	14.72	15.30	15.78
	6H	7.50	7.98	8.02	8.50	8.99	14.30	14.78	14.82	15.30	15.79
	8H	8.03	8.45	8.54	8.95	9.52	14.36	14.79	14.88	15.29	15.86