

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: P1061682

Luminaire Tested: S125RDRP-S610D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061682
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: S125RDRP-S610D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

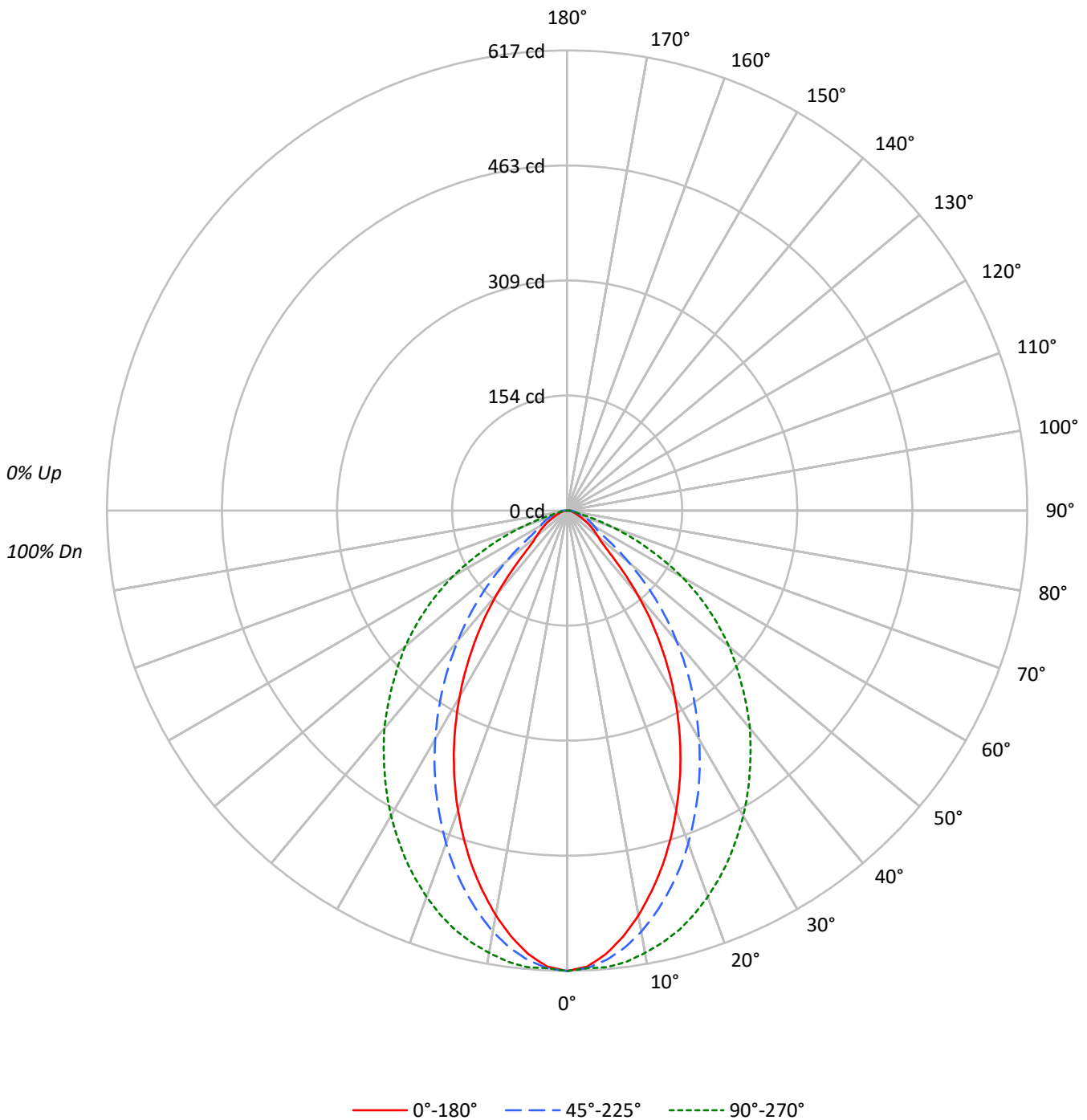
Lumens per Lamp: N/A
Luminaire Lumens: 894.1 lumens
Efficiency: N/A
Efficacy: 45.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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: P1061682

CATALOG NUMBER: S125RDRP-S610D830-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1061682

CATALOG NUMBER: S125RDRP-S610D830-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	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	105	103	100	101	99	97	98	96	94	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	88	81	76	94	86	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	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	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	40	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4250	4250	4250
5°	4125	4180	4248
10°	3852	4008	4210
15°	3516	3764	4147
20°	3134	3480	4037
25°	2731	3160	3907
30°	2294	2811	3755
35°	1825	2443	3589
40°	1315	2052	3425
45°	779	1629	3226
50°	576	1159	3036
55°	489	717	2780
60°	398	578	2448
65°	310	534	1934
70°	264	463	1294
75°	245	402	524
80°	262	416	365
85°	308	624	411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3226 cd/sqm



TEST NUMBER: P1061682

CATALOG NUMBER: S125RDRP-S610D830-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	6.4
10°-20°	149.4	16.7
20°-30°	195.3	21.8
30°-40°	190.2	21.3
40°-50°	142.7	16.0
50°-60°	89.5	10.0
60°-70°	46.6	5.2
70°-80°	16.9	1.9
80°-90°	6.7	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°	401.6	44.9
0°-40°	591.8	66.2
0°-60°	824.0	92.2
0°-90°	894.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	894.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	617	617	617	617	617	
5°	597	605	605	609	615	56
15°	493	508	528	561	582	138
25°	360	379	416	472	514	164
35°	217	240	291	368	427	135
45°	80	104	167	258	331	67
55°	41	43	60	156	232	36
65°	19	20	33	63	119	20
75°	9	12	15	16	20	10
85°	4	7	8	7	5	4
90°	0	0	0	0	0	



TEST NUMBER: P1061682

CATALOG NUMBER: S125RDRP-S610D830-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	617.3	617.3	617.3	617.3	617.3
2.5°	612.0	617.9	614.0	614.0	614.0
5°	596.9	604.8	604.8	609.4	614.6
7.5°	575.9	585.1	591.0	602.2	610.0
10°	551.0	562.2	573.3	591.7	602.2
12.5°	522.8	535.9	551.7	577.2	593.0
15°	493.3	507.7	528.0	560.8	581.8
17.5°	461.1	478.2	502.5	541.8	567.4
20°	427.7	444.7	474.9	519.5	551.0
22.5°	394.2	412.6	445.4	495.9	533.3
25°	359.5	379.1	415.9	472.3	514.3
27.5°	324.0	344.4	385.0	448.0	493.3
30°	288.6	309.6	353.6	421.8	472.3
32.5°	253.2	275.5	322.1	394.9	450.0
35°	217.1	240.1	290.6	368.0	427.0
37.5°	182.4	205.3	259.1	340.4	404.1
40°	146.3	171.2	228.3	312.9	381.1
42.5°	110.9	136.4	197.4	285.3	356.2
45°	80.0	103.6	167.3	258.4	331.3
47.5°	61.7	74.8	136.4	230.9	307.0
50°	53.8	57.7	108.2	205.3	283.4
52.5°	46.6	49.2	81.3	181.7	257.8
55°	40.7	42.6	59.7	156.1	231.6
57.5°	34.1	36.7	47.2	131.2	204.7
60°	28.9	30.2	42.0	108.2	177.8
62.5°	23.6	24.9	37.4	85.3	147.6
65°	19.0	20.3	32.8	63.0	118.7
67.5°	15.7	16.4	27.6	44.6	91.2
70°	13.1	13.8	23.0	30.8	64.3
72.5°	11.2	13.1	18.4	22.3	40.7
75°	9.2	12.5	15.1	15.7	19.7
77.5°	7.9	11.8	12.5	12.5	11.2
80°	6.6	9.8	10.5	9.8	9.2
82.5°	5.2	7.9	8.5	8.5	7.2
85°	3.9	6.6	7.9	7.2	5.2
87.5°	2.6	5.9	6.6	5.9	3.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061682
 CATALOG NUMBER: S125RDRP-S610D830-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	4.94	6.29	5.31	6.61	6.92	14.56	15.91	14.92	16.22	16.54
	3H	5.80	7.00	6.18	7.33	7.69	15.40	16.60	15.78	16.93	17.29
	4H	6.22	7.34	6.63	7.69	8.08	15.47	16.59	15.88	16.94	17.33
	6H	6.65	7.68	7.07	8.05	8.45	15.46	16.49	15.87	16.86	17.25
	8H	6.83	7.81	7.26	8.20	8.60	15.44	16.42	15.87	16.81	17.21
	12H	6.99	7.92	7.42	8.31	8.74	15.43	16.36	15.86	16.75	17.18
4H	2H	5.90	7.02	6.31	7.37	7.76	14.42	15.54	14.82	15.89	16.27
	3H	6.96	7.87	7.37	8.28	8.68	15.33	16.25	15.74	16.65	17.05
	4H	7.52	8.34	7.96	8.76	9.20	15.43	16.25	15.87	16.67	17.11
	6H	8.12	8.83	8.59	9.28	9.74	15.46	16.17	15.92	16.61	17.08
	8H	8.36	9.02	8.83	9.47	9.94	15.46	16.12	15.93	16.57	17.04
	12H	8.59	9.17	9.07	9.65	10.13	15.47	16.06	15.96	16.54	17.01
8H	4H	8.00	8.66	8.46	9.10	9.57	15.36	16.02	15.83	16.47	16.94
	6H	8.81	9.35	9.31	9.84	10.33	15.41	15.95	15.91	16.45	16.93
	8H	9.19	9.67	9.71	10.19	10.68	15.45	15.93	15.97	16.45	16.94
	12H	9.58	10.01	10.09	10.50	11.07	15.51	15.94	16.02	16.43	17.00
12H	4H	8.05	8.63	8.53	9.11	9.59	15.33	15.91	15.81	16.39	16.87
	6H	8.93	9.42	9.45	9.93	10.42	15.38	15.87	15.90	16.38	16.87
	8H	9.42	9.85	9.93	10.34	10.91	15.45	15.88	15.96	16.37	16.94