

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: P1061680

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061680
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-S610D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

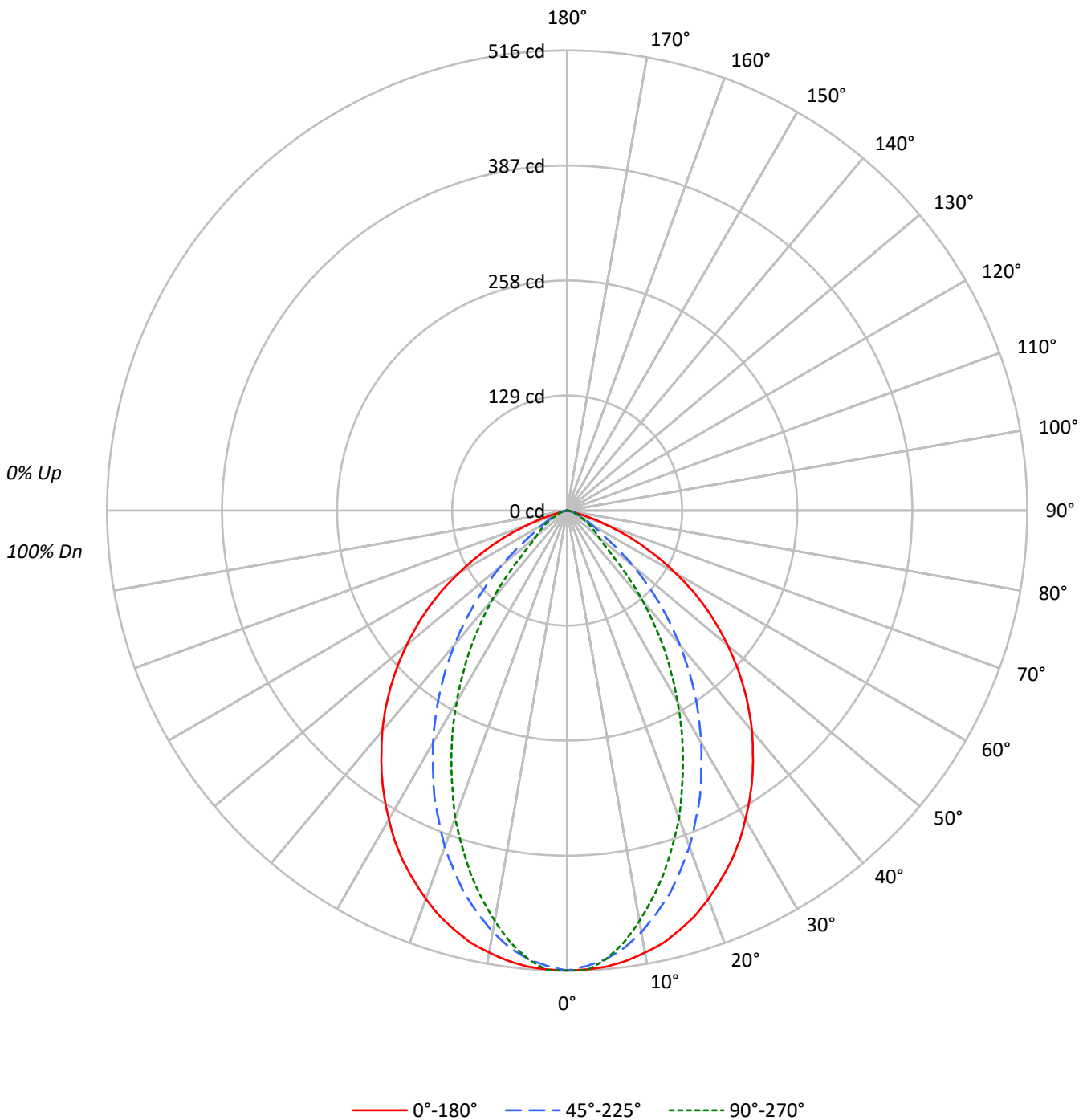
Lumens per Lamp: N/A
Luminaire Lumens: 746.0 lumens
Efficiency: N/A
Efficacy: 38.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1061680

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

Luminous Intensity Polar Plot





TEST NUMBER: P1061680

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

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°	3551	3551	3551
5°	3547	3488	3488
10°	3519	3355	3267
15°	3471	3168	2995
20°	3395	2939	2689
25°	3301	2679	2335
30°	3179	2391	1969
35°	3046	2094	1598
40°	2899	1767	1184
45°	2725	1417	715
50°	2520	1039	492
55°	2274	637	409
60°	1932	434	325
65°	1527	331	256
70°	962	238	211
75°	314	176	176
80°	103	131	155
85°	55	103	103

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2725 cd/sqm



TEST NUMBER: P1061680

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.7	6.4
10°-20°	126.0	16.9
20°-30°	165.7	22.2
30°-40°	162.8	21.8
40°-50°	123.2	16.5
50°-60°	74.7	10.0
60°-70°	35.3	4.7
70°-80°	9.2	1.2
80°-90°	1.4	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°	339.4	45.5
0°-40°	502.2	67.3
0°-60°	700.1	93.9
0°-90°	746.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	746.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	513	512	505	505	505	49
15°	487	474	444	427	420	137
25°	434	402	353	320	307	200
35°	362	314	249	205	190	226
45°	280	220	146	92	73	216
55°	189	130	53	36	34	169
65°	94	48	20	17	16	92
75°	12	8	7	7	7	18
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P1061680

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	515.8	515.8	515.8	515.8	515.8
2.5°	515.1	515.1	511.2	515.8	515.8
5°	513.2	511.9	504.7	505.3	504.7
7.5°	509.2	506.6	494.2	490.9	488.3
10°	503.3	498.1	479.8	471.9	467.3
12.5°	496.8	487.6	462.7	451.6	444.4
15°	487.0	473.9	444.4	427.3	420.1
17.5°	476.5	457.5	422.7	402.4	393.2
20°	463.4	441.1	401.1	376.2	367.0
22.5°	449.0	422.7	376.2	348.7	336.2
25°	434.5	401.8	352.6	319.8	307.4
27.5°	418.1	380.8	325.7	291.7	277.9
30°	399.8	359.8	300.8	265.4	247.7
32.5°	381.4	338.2	274.6	235.9	218.2
35°	362.4	313.9	249.1	205.1	190.1
37.5°	342.1	291.0	222.8	177.0	159.3
40°	322.5	268.1	196.6	148.1	131.7
42.5°	301.5	245.1	170.4	119.9	101.6
45°	279.9	220.2	145.5	92.4	73.4
47.5°	257.6	197.9	120.6	68.2	55.1
50°	235.3	174.3	97.0	50.5	45.9
52.5°	212.4	151.4	73.4	41.9	40.0
55°	189.4	129.8	53.1	36.0	34.1
57.5°	165.8	106.2	40.0	30.8	28.8
60°	140.3	85.2	31.5	25.6	23.6
62.5°	116.7	66.9	25.6	21.0	19.7
65°	93.7	47.8	20.3	17.0	15.7
67.5°	70.1	32.1	15.7	13.1	13.1
70°	47.8	21.0	11.8	10.5	10.5
72.5°	28.8	12.5	8.5	8.5	8.5
75°	11.8	7.9	6.6	6.6	6.6
77.5°	3.9	4.6	4.6	5.2	5.2
80°	2.6	2.6	3.3	3.9	3.9
82.5°	1.3	2.0	2.0	2.6	2.6
85°	0.7	0.7	1.3	1.3	1.3
87.5°	0.0	0.0	0.0	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1061680
 CATALOG NUMBER: S125RDRP-S610D830-X4F0-XX-UDD-SVL-B

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	13.73	15.06	14.10	15.38	15.69	4.39	5.72	4.75	6.03	6.35
	3H	14.44	15.62	14.82	15.95	16.31	5.17	6.35	5.55	6.68	7.04
	4H	14.46	15.55	14.86	15.90	16.28	5.42	6.52	5.82	6.87	7.25
	6H	14.39	15.39	14.80	15.76	16.16	5.59	6.60	6.01	6.97	7.36
	8H	14.34	15.30	14.77	15.69	16.09	5.64	6.59	6.07	6.98	7.38
	12H	14.30	15.21	14.74	15.60	16.03	5.64	6.55	6.08	6.94	7.37
4H	2H	13.56	14.66	13.97	15.01	15.39	4.87	5.97	5.28	6.32	6.70
	3H	14.31	15.20	14.72	15.61	16.01	5.78	6.67	6.19	7.08	7.48
	4H	14.33	15.12	14.76	15.54	15.99	6.10	6.89	6.53	7.31	7.75
	6H	14.27	14.95	14.73	15.40	15.86	6.35	7.04	6.82	7.48	7.95
	8H	14.22	14.85	14.68	15.30	15.77	6.42	7.05	6.89	7.50	7.97
	12H	14.17	14.73	14.66	15.22	15.69	6.44	7.00	6.93	7.49	7.96
8H	4H	14.21	14.85	14.68	15.30	15.77	6.21	6.85	6.68	7.30	7.77
	6H	14.14	14.65	14.64	15.15	15.63	6.52	7.04	7.03	7.54	8.02
	8H	14.08	14.55	14.60	15.06	15.56	6.63	7.09	7.15	7.61	8.10
	12H	14.04	14.45	14.56	14.95	15.52	6.69	7.10	7.20	7.59	8.16
12H	4H	14.17	14.73	14.65	15.21	15.69	6.18	6.75	6.67	7.23	7.70
	6H	14.08	14.54	14.60	15.06	15.55	6.49	6.96	7.02	7.48	7.97
	8H	14.04	14.45	14.56	14.95	15.52	6.63	7.04	7.15	7.54	8.11