

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: P1061705

Luminaire Tested: S125RDRP-S610D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061705
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-S610D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

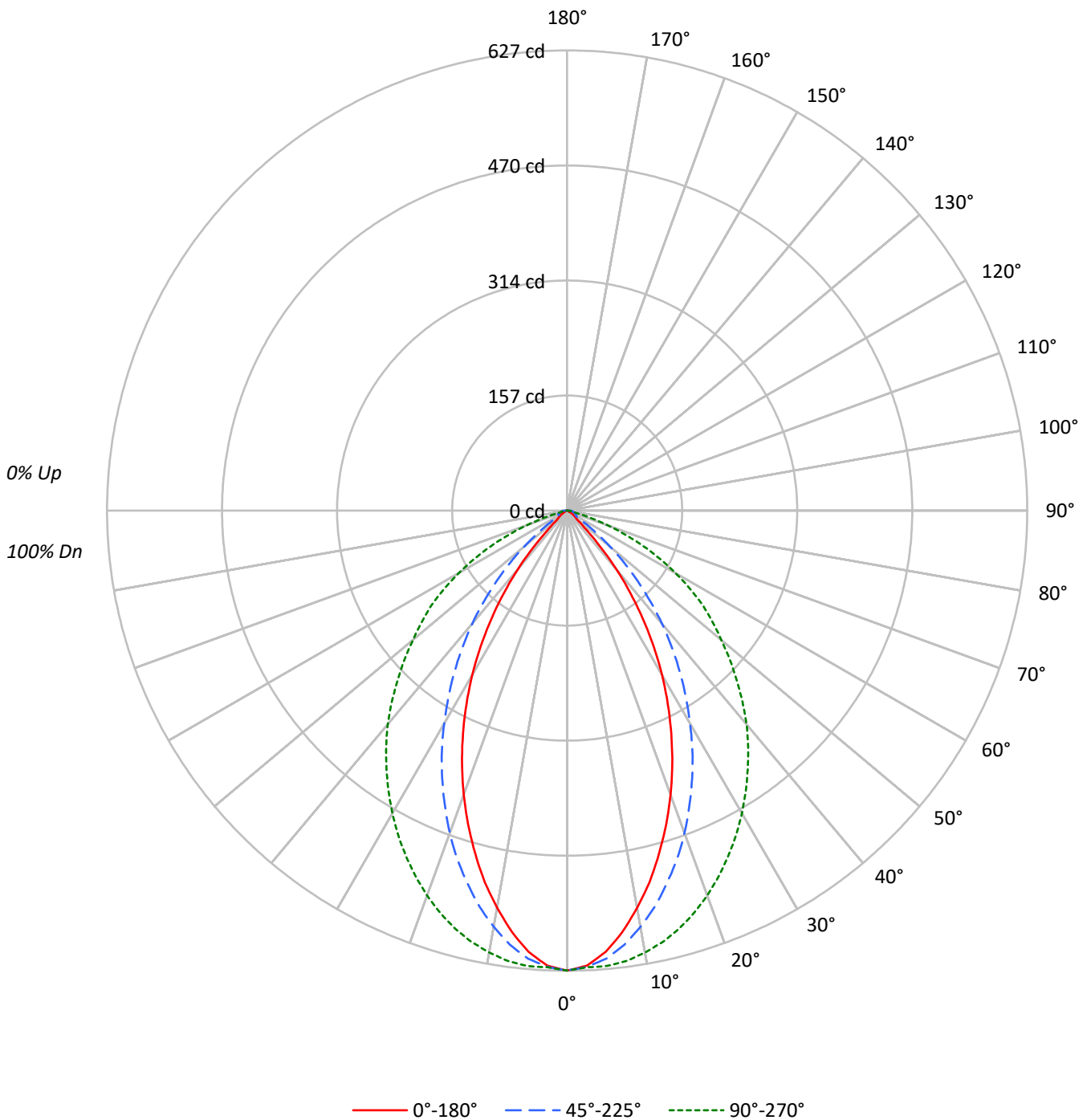
Lumens per Lamp: N/A
Luminaire Lumens: 806.1 lumens
Efficiency: N/A
Efficacy: 41.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4315	4315	4315
5°	4171	4235	4305
10°	3842	4026	4274
15°	3449	3747	4203
20°	3020	3427	4089
25°	2550	3061	3946
30°	2056	2663	3786
35°	1511	2244	3607
40°	944	1810	3420
45°	353	1322	3179
50°	165	827	2935
55°	120	343	2714
60°	85	180	2349
65°	51	213	1861
70°	46	248	1182
75°	61	247	370
80°	91	305	274
85°	182	490	363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3179 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	7.1
10°-20°	148.8	18.5
20°-30°	189.5	23.5
30°-40°	176.4	21.9
40°-50°	120.9	15.0
50°-60°	66.6	8.3
60°-70°	31.5	3.9
70°-80°	9.9	1.2
80°-90°	5.1	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°	395.8	49.1
0°-40°	572.2	71.0
0°-60°	759.6	94.2
0°-90°	806.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	806.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	604	611	613	617	623	56
15°	484	499	526	565	590	135
25°	336	357	403	468	519	153
35°	180	205	267	355	429	111
45°	36	61	136	241	326	35
55°	10	12	29	134	226	9
65°	3	4	13	49	114	4
75°	2	4	9	10	14	2
85°	2	5	6	5	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.7	626.7	626.7	626.7	626.7
2.5°	620.5	626.7	622.1	622.1	622.8
5°	603.5	611.3	612.8	617.4	622.8
7.5°	578.9	588.9	596.6	609.7	619.0
10°	549.5	561.9	575.8	597.4	611.3
12.5°	518.7	531.8	552.6	582.7	602.0
15°	483.9	499.4	525.6	565.0	589.7
17.5°	448.4	465.4	497.8	544.1	575.0
20°	412.1	429.9	467.7	519.4	558.0
22.5°	374.3	393.6	435.3	494.0	539.5
25°	335.7	356.6	402.9	467.7	519.4
27.5°	297.1	318.8	369.7	440.7	498.6
30°	258.6	280.9	335.0	412.9	476.2
32.5°	219.2	243.9	301.0	385.1	453.0
35°	179.8	205.3	267.0	355.0	429.1
37.5°	141.2	167.5	233.9	326.5	405.2
40°	105.0	131.2	201.4	297.9	380.5
42.5°	67.9	95.7	167.5	268.6	353.5
45°	36.3	61.0	135.8	240.8	326.5
47.5°	19.3	32.4	105.7	213.0	301.0
50°	15.4	17.8	77.2	185.2	274.0
52.5°	12.3	13.9	49.4	156.7	250.1
55°	10.0	11.6	28.6	134.3	226.1
57.5°	7.7	9.3	16.2	111.9	198.4
60°	6.2	6.9	13.1	89.5	170.6
62.5°	3.9	5.4	13.1	69.5	142.8
65°	3.1	3.9	13.1	49.4	114.2
67.5°	3.1	3.1	13.1	32.4	85.7
70°	2.3	2.3	12.3	20.8	58.7
72.5°	2.3	2.3	10.8	13.9	34.0
75°	2.3	3.9	9.3	10.0	13.9
77.5°	2.3	6.2	8.5	8.5	7.7
80°	2.3	6.2	7.7	6.9	6.9
82.5°	2.3	6.2	6.2	6.2	5.4
85°	2.3	5.4	6.2	5.4	4.6
87.5°	2.3	5.4	5.4	5.4	3.1
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	14.12	15.41	14.49	15.72	16.04
	3H	0.00	0.00	0.00	0.00	0.00	14.91	16.05	15.29	16.38	16.74
	4H	0.00	0.00	0.00	0.00	0.00	14.94	16.00	15.34	16.35	16.73
	6H	0.00	0.00	0.00	0.00	0.00	14.89	15.87	15.31	16.24	16.63
	8H	0.00	0.00	0.00	0.00	0.21	14.87	15.79	15.30	16.18	16.59
	12H	0.00	0.11	0.00	0.50	0.93	14.85	15.73	15.28	16.11	16.54
4H	2H	0.00	0.00	0.00	0.00	0.00	13.91	14.97	14.31	15.32	15.70
	3H	0.00	0.00	0.00	0.04	0.45	14.74	15.60	15.15	16.00	16.41
	4H	0.00	0.15	0.00	0.57	1.02	14.77	15.54	15.21	15.96	16.40
	6H	0.88	1.54	1.34	1.99	2.46	14.76	15.42	15.22	15.87	16.34
	8H	1.62	2.24	2.09	2.69	3.16	14.74	15.36	15.21	15.81	16.28
	12H	2.36	2.90	2.84	3.39	3.86	14.74	15.29	15.23	15.77	16.25
8H	4H	1.42	2.04	1.89	2.49	2.96	14.66	15.28	15.13	15.72	16.20
	6H	3.17	3.68	3.67	4.17	4.66	14.66	15.16	15.16	15.66	16.14
	8H	4.12	4.58	4.65	5.09	5.59	14.66	15.12	15.19	15.63	16.13
	12H	5.05	5.45	5.57	5.95	6.52	14.71	15.11	15.22	15.60	16.18
12H	4H	1.72	2.27	2.21	2.75	3.23	14.61	15.16	15.10	15.64	16.12
	6H	3.63	4.08	4.15	4.60	5.09	14.61	15.07	15.13	15.58	16.07
	8H	4.76	5.16	5.28	5.66	6.23	14.65	15.05	15.17	15.55	16.12