

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: P1061706

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061706
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
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-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

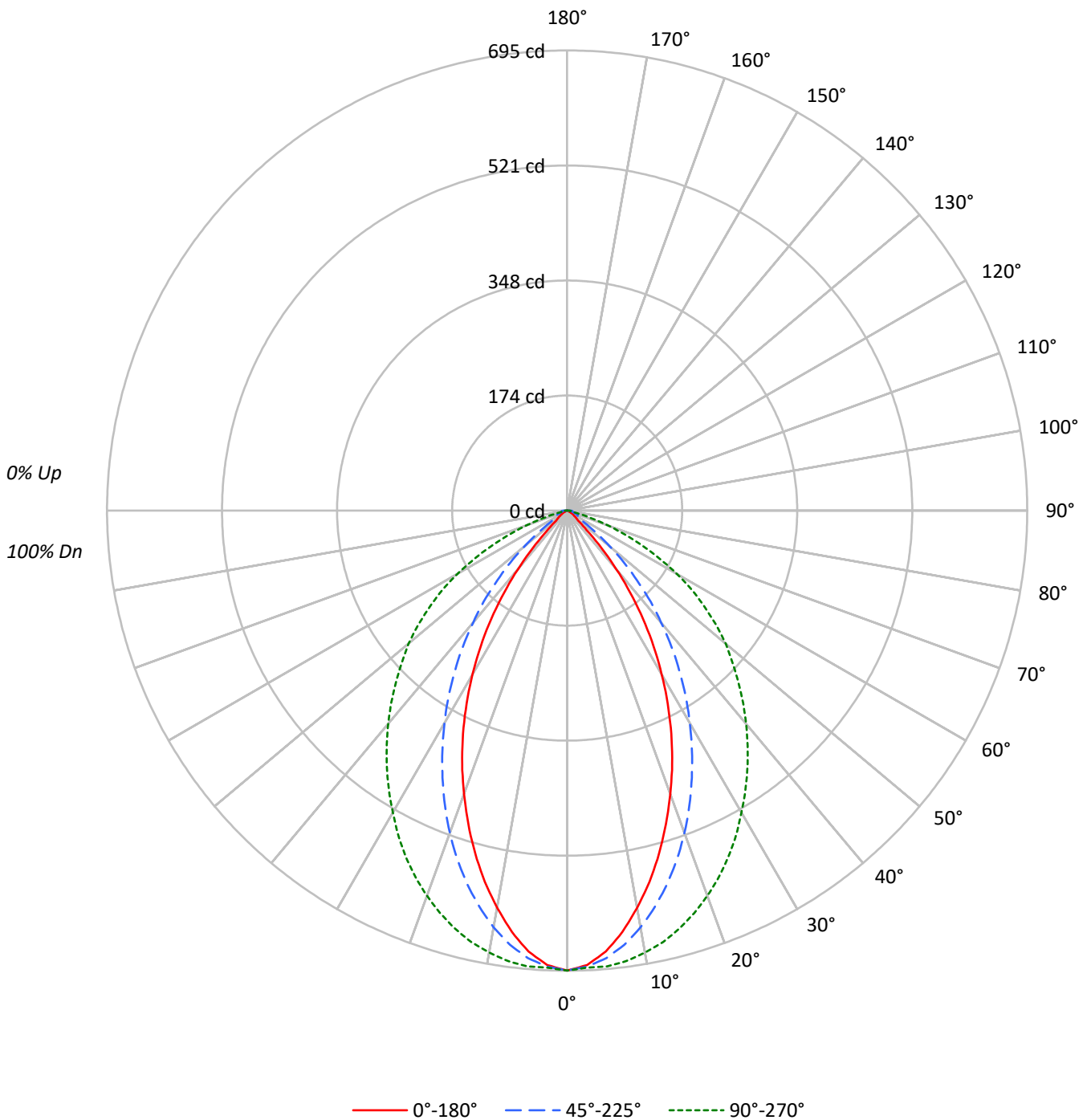
Lumens per Lamp: N/A
Luminaire Lumens: 898.8 lumens
Efficiency: N/A
Efficacy: 45.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	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	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4783	4783	4783
5°	4620	4689	4775
10°	4258	4468	4738
15°	3824	4160	4660
20°	3337	3795	4536
25°	2827	3384	4380
30°	2271	2946	4185
35°	1680	2485	3990
40°	1041	1985	3781
45°	406	1451	3555
50°	191	909	3348
55°	139	389	3039
60°	95	277	2636
65°	64	290	2050
70°	62	264	1290
75°	82	266	410
80°	123	305	274
85°	182	608	427

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3555 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.7	7.1
10°-20°	165.1	18.4
20°-30°	210.2	23.4
30°-40°	195.7	21.8
40°-50°	134.7	15.0
50°-60°	76.3	8.5
60°-70°	36.0	4.0
70°-80°	11.3	1.3
80°-90°	5.9	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°	439.0	48.8
0°-40°	634.7	70.6
0°-60°	845.7	94.1
0°-90°	898.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	898.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	668	678	678	685	691	62
15°	536	554	584	628	654	149
25°	372	396	445	520	577	170
35°	200	228	296	397	475	124
45°	42	66	149	269	365	39
55°	12	13	32	155	253	11
65°	4	5	18	56	126	4
75°	3	7	10	11	15	3
85°	2	6	8	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	694.7	694.7	694.7	694.7	694.7
2.5°	687.0	694.0	689.3	690.1	690.9
5°	668.5	677.7	678.5	684.7	690.9
7.5°	641.5	653.0	661.5	676.2	686.2
10°	609.0	622.9	639.1	663.1	677.7
12.5°	574.3	590.5	612.9	646.9	667.7
15°	536.5	554.2	583.6	627.6	653.8
17.5°	496.3	516.4	551.9	604.4	637.6
20°	455.4	477.0	518.0	578.2	619.1
22.5°	414.5	436.9	482.4	549.6	599.0
25°	372.1	396.0	445.4	520.3	576.6
27.5°	328.8	353.5	408.3	490.2	552.7
30°	285.6	311.9	370.5	459.3	526.4
32.5°	243.2	269.4	333.5	428.4	501.0
35°	199.9	227.7	295.6	396.8	474.7
37.5°	156.7	186.8	258.6	364.3	447.7
40°	115.8	144.3	220.8	332.7	420.7
42.5°	77.2	105.0	186.8	301.0	392.9
45°	41.7	66.4	149.0	269.4	365.1
47.5°	22.4	35.5	116.6	238.5	338.1
50°	17.8	20.1	84.9	210.0	312.6
52.5°	14.7	16.2	55.6	182.9	283.3
55°	11.6	13.1	32.4	155.2	253.2
57.5°	9.3	10.8	20.8	128.9	223.9
60°	6.9	8.5	20.1	103.4	191.4
62.5°	5.4	6.2	18.5	79.5	157.5
65°	3.9	4.6	17.8	55.6	125.8
67.5°	3.1	3.9	16.2	35.5	94.2
70°	3.1	3.1	13.1	23.2	64.1
72.5°	3.1	5.4	11.6	15.4	38.6
75°	3.1	6.9	10.0	10.8	15.4
77.5°	3.1	7.7	8.5	8.5	8.5
80°	3.1	6.9	7.7	7.7	6.9
82.5°	3.1	6.2	6.9	7.7	6.2
85°	2.3	6.2	7.7	6.9	5.4
87.5°	2.3	6.2	6.9	6.2	3.9
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	14.68	15.97	15.05	16.29	16.60
	3H	0.00	0.00	0.00	0.00	0.00	15.40	16.55	15.78	16.88	17.24
	4H	0.00	0.00	0.00	0.00	0.00	15.43	16.49	15.83	16.84	17.22
	6H	0.00	0.00	0.00	0.37	0.76	15.38	16.35	15.79	16.72	17.12
	8H	0.00	0.59	0.10	0.98	1.39	15.35	16.28	15.78	16.67	17.07
	12H	0.26	1.14	0.69	1.52	1.95	15.34	16.22	15.77	16.60	17.03
4H	2H	0.00	0.26	0.00	0.62	1.00	14.47	15.54	14.88	15.89	16.27
	3H	0.01	0.88	0.43	1.29	1.69	15.23	16.10	15.64	16.50	16.91
	4H	1.01	1.79	1.45	2.21	2.65	15.26	16.03	15.70	16.45	16.90
	6H	2.29	2.95	2.75	3.40	3.87	15.24	15.91	15.70	16.35	16.82
	8H	2.87	3.49	3.34	3.94	4.41	15.22	15.85	15.69	16.29	16.76
	12H	3.43	3.98	3.92	4.47	4.94	15.23	15.78	15.72	16.26	16.74
8H	4H	2.43	3.05	2.90	3.50	3.97	15.14	15.77	15.61	16.21	16.68
	6H	3.98	4.49	4.48	4.99	5.47	15.13	15.64	15.63	16.14	16.62
	8H	4.78	5.24	5.30	5.75	6.24	15.14	15.60	15.67	16.12	16.61
	12H	5.62	6.03	6.14	6.52	7.09	15.20	15.61	15.72	16.10	16.67
12H	4H	2.65	3.20	3.13	3.68	4.15	15.10	15.65	15.59	16.13	16.61
	6H	4.35	4.81	4.87	5.32	5.81	15.09	15.54	15.61	16.06	16.55
	8H	5.34	5.75	5.86	6.24	6.81	15.13	15.54	15.65	16.03	16.60