

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: P1061795

Luminaire Tested: S125RDRP-S850D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061795
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-S850D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

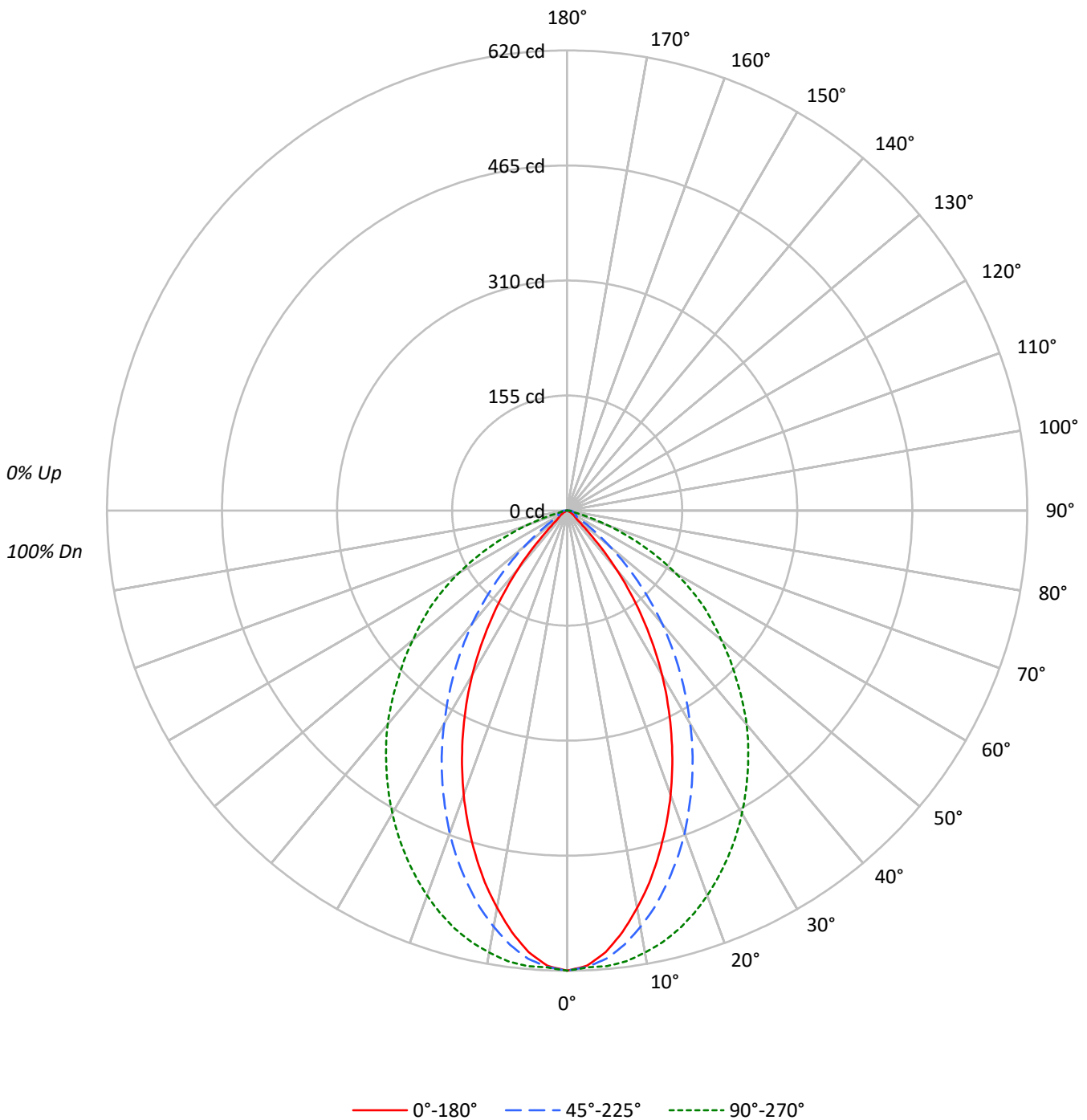
Lumens per Lamp: N/A
Luminaire Lumens: 797.3 lumens
Efficiency: N/A
Efficacy: 30.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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

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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°	4268	4268	4268
5°	4126	4190	4258
10°	3801	3982	4227
15°	3412	3706	4158
20°	2987	3390	4045
25°	2523	3027	3903
30°	2034	2634	3745
35°	1495	2221	3568
40°	933	1791	3383
45°	350	1309	3144
50°	164	817	2903
55°	119	339	2685
60°	84	179	2323
65°	51	212	1841
70°	46	246	1168
75°	61	245	364
80°	91	301	274
85°	182	482	363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3144 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	7.1
10°-20°	147.2	18.5
20°-30°	187.5	23.5
30°-40°	174.5	21.9
40°-50°	119.6	15.0
50°-60°	65.8	8.3
60°-70°	31.2	3.9
70°-80°	9.8	1.2
80°-90°	5.0	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°	391.5	49.1
0°-40°	566.0	71.0
0°-60°	751.4	94.2
0°-90°	797.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	797.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	597	605	606	611	616	55
15°	479	494	520	559	583	133
25°	332	353	398	463	514	152
35°	178	203	264	351	424	110
45°	36	60	134	238	323	34
55°	10	12	28	133	224	9
65°	3	4	13	49	113	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°	619.9	619.9	619.9	619.9	619.9
2.5°	613.8	619.9	615.3	615.3	616.1
5°	597.0	604.6	606.2	610.8	616.1
7.5°	572.6	582.5	590.1	603.1	612.3
10°	543.6	555.8	569.5	590.9	604.6
12.5°	513.0	526.0	546.6	576.4	595.5
15°	478.7	493.9	519.9	558.8	583.3
17.5°	443.6	460.4	492.4	538.2	568.8
20°	407.7	425.2	462.6	513.8	552.0
22.5°	370.3	389.4	430.6	488.6	533.6
25°	332.1	352.7	398.5	462.6	513.8
27.5°	293.9	315.3	365.7	435.9	493.2
30°	255.8	277.9	331.3	408.4	471.0
32.5°	216.8	241.2	297.7	381.0	448.1
35°	177.9	203.1	264.2	351.2	424.5
37.5°	139.7	165.7	231.3	322.9	400.8
40°	103.8	129.8	199.3	294.7	376.4
42.5°	67.2	94.7	165.7	265.7	349.7
45°	35.9	60.3	134.4	238.2	322.9
47.5°	19.1	32.1	104.6	210.7	297.7
50°	15.3	17.6	76.3	183.2	271.0
52.5°	12.2	13.7	48.9	155.0	247.4
55°	9.9	11.5	28.2	132.8	223.7
57.5°	7.6	9.2	16.0	110.7	196.2
60°	6.1	6.9	13.0	88.6	168.7
62.5°	3.8	5.3	13.0	68.7	141.2
65°	3.1	3.8	13.0	48.9	113.0
67.5°	3.1	3.1	13.0	32.1	84.7
70°	2.3	2.3	12.2	20.6	58.0
72.5°	2.3	2.3	10.7	13.7	33.6
75°	2.3	3.8	9.2	9.9	13.7
77.5°	2.3	6.1	8.4	8.4	7.6
80°	2.3	6.1	7.6	6.9	6.9
82.5°	2.3	6.1	6.1	6.1	5.3
85°	2.3	5.3	6.1	5.3	4.6
87.5°	2.3	5.3	5.3	5.3	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	14.09	15.37	14.45	15.69	16.00
	3H	0.00	0.00	0.00	0.00	0.00	14.87	16.01	15.25	16.34	16.71
	4H	0.00	0.00	0.00	0.00	0.00	14.90	15.96	15.30	16.31	16.69
	6H	0.00	0.00	0.00	0.00	0.00	14.86	15.83	15.27	16.20	16.59
	8H	0.00	0.00	0.00	0.00	0.19	14.83	15.75	15.26	16.14	16.55
	12H	0.00	0.10	0.00	0.48	0.91	14.81	15.69	15.25	16.07	16.51
4H	2H	0.00	0.00	0.00	0.00	0.00	13.87	14.93	14.27	15.28	15.66
	3H	0.00	0.00	0.00	0.03	0.43	14.70	15.56	15.11	15.97	16.37
	4H	0.00	0.12	0.00	0.54	0.98	14.73	15.50	15.17	15.92	16.37
	6H	0.84	1.51	1.31	1.95	2.42	14.72	15.38	15.18	15.83	16.30
	8H	1.58	2.20	2.05	2.65	3.12	14.70	15.32	15.17	15.77	16.24
	12H	2.32	2.87	2.81	3.35	3.83	14.70	15.25	15.19	15.73	16.21
8H	4H	1.39	2.01	1.86	2.45	2.92	14.62	15.24	15.09	15.69	16.16
	6H	3.13	3.63	3.63	4.13	4.61	14.62	15.12	15.12	15.62	16.10
	8H	4.08	4.53	4.60	5.05	5.54	14.63	15.08	15.15	15.60	16.09
	12H	5.00	5.40	5.52	5.90	6.47	14.67	15.07	15.19	15.57	16.14
12H	4H	1.69	2.23	2.17	2.72	3.19	14.58	15.12	15.06	15.61	16.08
	6H	3.58	4.04	4.10	4.55	5.04	14.57	15.03	15.10	15.54	16.04
	8H	4.71	5.11	5.23	5.61	6.18	14.61	15.01	15.13	15.51	16.08