

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: P1061796

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061796
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-S850D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

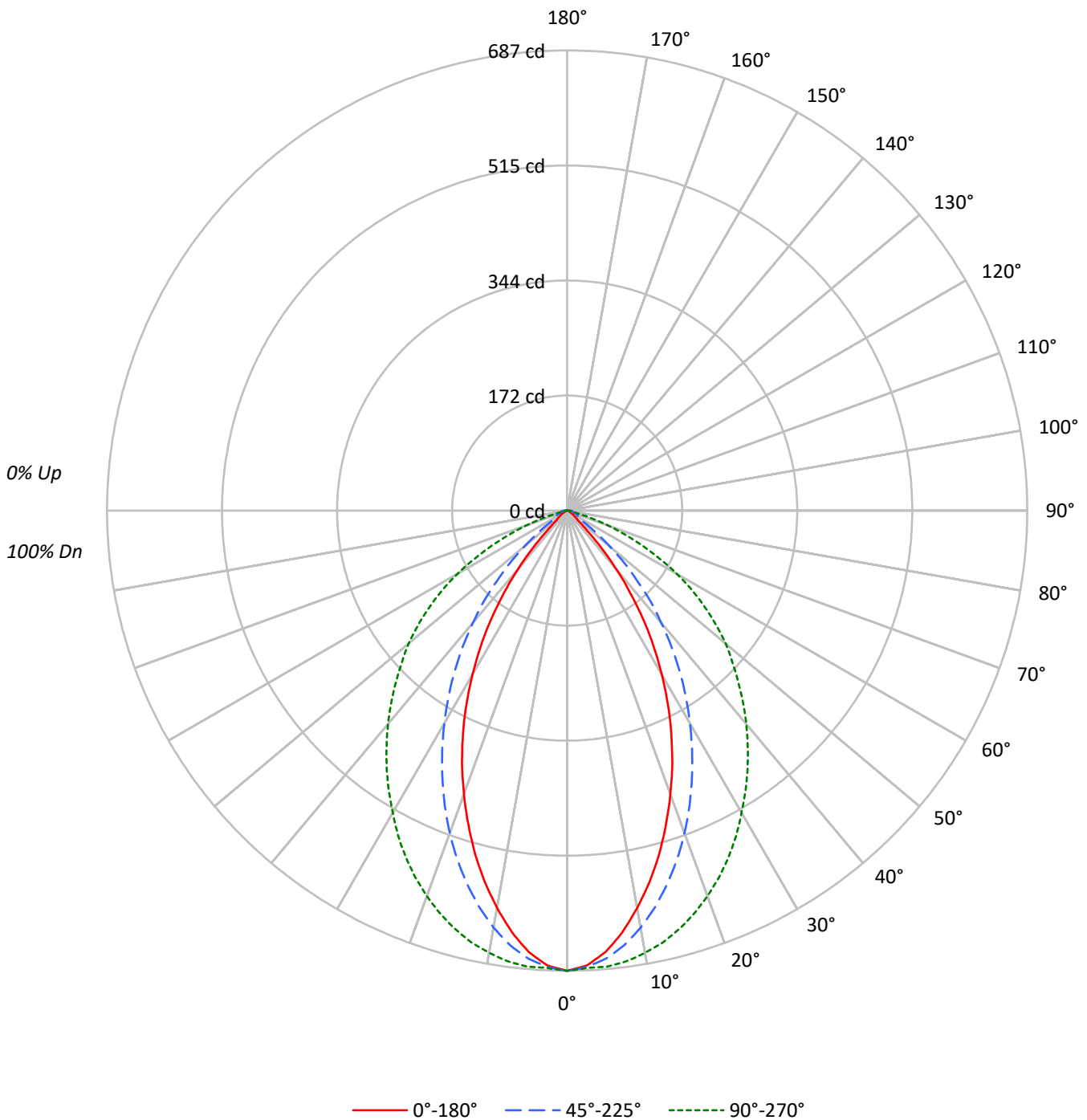
Lumens per Lamp: N/A
Luminaire Lumens: 889.1 lumens
Efficiency: N/A
Efficacy: 34.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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°	4732	4732	4732
5°	4570	4639	4723
10°	4212	4420	4687
15°	3783	4114	4610
20°	3301	3754	4487
25°	2796	3347	4333
30°	2246	2914	4140
35°	1663	2458	3947
40°	1029	1963	3740
45°	401	1435	3517
50°	189	900	3312
55°	138	385	3006
60°	95	274	2608
65°	62	287	2028
70°	62	262	1276
75°	82	263	407
80°	123	301	274
85°	182	600	419

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3517 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	7.1
10°-20°	163.3	18.4
20°-30°	208.0	23.4
30°-40°	193.6	21.8
40°-50°	133.2	15.0
50°-60°	75.4	8.5
60°-70°	35.6	4.0
70°-80°	11.1	1.3
80°-90°	5.8	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°	434.3	48.8
0°-40°	627.8	70.6
0°-60°	836.5	94.1
0°-90°	889.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	889.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	661	670	671	677	683	61
15°	531	548	577	621	647	148
25°	368	392	441	515	570	168
35°	198	225	292	392	470	122
45°	41	66	147	266	361	39
55°	12	13	32	154	250	11
65°	4	5	18	55	124	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°	687.2	687.2	687.2	687.2	687.2
2.5°	679.6	686.4	681.9	682.6	683.4
5°	661.2	670.4	671.2	677.3	683.4
7.5°	634.5	646.0	654.4	668.9	678.8
10°	602.4	616.2	632.2	655.9	670.4
12.5°	568.1	584.1	606.3	639.9	660.5
15°	530.7	548.2	577.2	620.8	646.7
17.5°	491.0	510.8	545.9	597.9	630.7
20°	450.5	471.9	512.3	571.9	612.4
22.5°	410.0	432.2	477.2	543.7	592.5
25°	368.0	391.7	440.6	514.6	570.4
27.5°	325.3	349.7	403.9	484.9	546.7
30°	282.5	308.5	366.5	454.3	520.7
32.5°	240.5	266.5	329.9	423.8	495.5
35°	197.8	225.2	292.4	392.5	469.6
37.5°	155.0	184.8	255.8	360.4	442.9
40°	114.5	142.8	218.4	329.1	416.1
42.5°	76.4	103.8	184.8	297.8	388.6
45°	41.2	65.7	147.4	266.5	361.2
47.5°	22.1	35.1	115.3	235.9	334.4
50°	17.6	19.9	84.0	207.7	309.2
52.5°	14.5	16.0	55.0	181.0	280.2
55°	11.5	13.0	32.1	153.5	250.4
57.5°	9.2	10.7	20.6	127.5	221.4
60°	6.9	8.4	19.9	102.3	189.4
62.5°	5.3	6.1	18.3	78.6	155.8
65°	3.8	4.6	17.6	55.0	124.5
67.5°	3.1	3.8	16.0	35.1	93.2
70°	3.1	3.1	13.0	22.9	63.4
72.5°	3.1	5.3	11.5	15.3	38.2
75°	3.1	6.9	9.9	10.7	15.3
77.5°	3.1	7.6	8.4	8.4	8.4
80°	3.1	6.9	7.6	7.6	6.9
82.5°	3.1	6.1	6.9	7.6	6.1
85°	2.3	6.1	7.6	6.9	5.3
87.5°	2.3	6.1	6.9	6.1	3.8
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	14.64	15.93	15.01	16.25	16.56
	3H	0.00	0.00	0.00	0.00	0.00	15.36	16.51	15.74	16.84	17.20
	4H	0.00	0.00	0.00	0.00	0.00	15.39	16.45	15.79	16.80	17.19
	6H	0.00	0.00	0.00	0.36	0.76	15.34	16.31	15.75	16.69	17.08
	8H	0.00	0.59	0.09	0.98	1.38	15.32	16.24	15.75	16.63	17.04
	12H	0.25	1.14	0.69	1.52	1.95	15.30	16.18	15.73	16.56	16.99
4H	2H	0.00	0.23	0.00	0.58	0.96	14.44	15.50	14.84	15.85	16.23
	3H	0.00	0.85	0.40	1.25	1.66	15.19	16.06	15.61	16.46	16.87
	4H	0.99	1.77	1.43	2.19	2.63	15.22	16.00	15.66	16.42	16.86
	6H	2.28	2.94	2.74	3.39	3.86	15.20	15.87	15.66	16.31	16.78
	8H	2.86	3.48	3.33	3.93	4.40	15.18	15.81	15.65	16.25	16.73
	12H	3.42	3.97	3.91	4.46	4.93	15.19	15.74	15.68	16.22	16.70
8H	4H	2.40	3.02	2.87	3.47	3.94	15.10	15.73	15.57	16.18	16.65
	6H	3.96	4.47	4.47	4.97	5.45	15.09	15.60	15.60	16.10	16.58
	8H	4.76	5.22	5.28	5.73	6.22	15.11	15.56	15.63	16.08	16.57
	12H	5.60	6.00	6.11	6.50	7.07	15.17	15.57	15.68	16.06	16.64
12H	4H	2.62	3.17	3.11	3.65	4.13	15.06	15.61	15.55	16.10	16.57
	6H	4.33	4.79	4.86	5.31	5.80	15.05	15.50	15.57	16.02	16.51
	8H	5.32	5.73	5.84	6.22	6.79	15.09	15.50	15.61	15.99	16.57