

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: P1061768

Luminaire Tested: S125RDRP-S850D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061768
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-S850D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

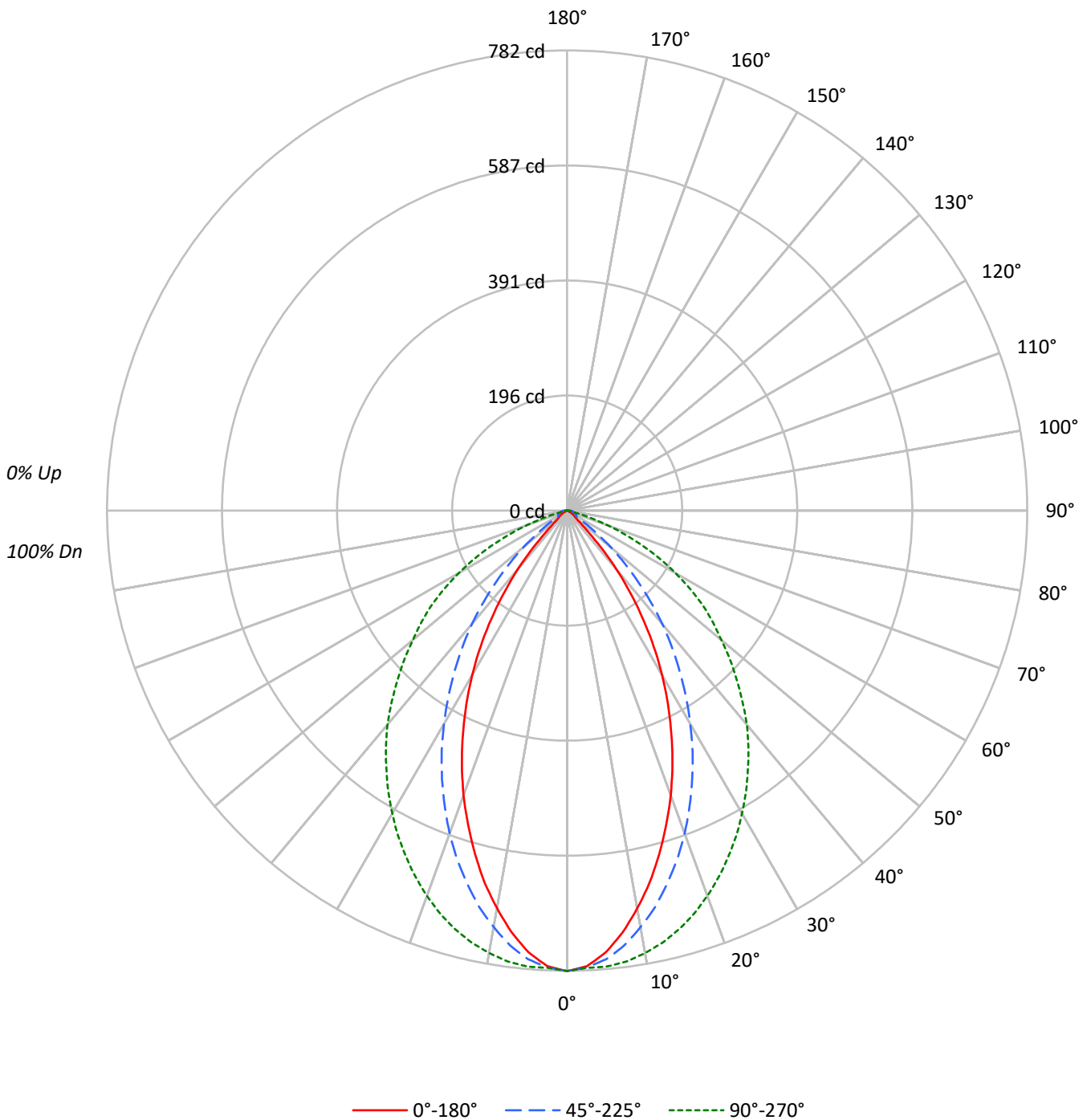
Lumens per Lamp: N/A
Luminaire Lumens: 1006.5 lumens
Efficiency: N/A
Efficacy: 39.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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					100			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65					65			
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59					59			
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54					54			
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49					49			
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42					42			
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5388	5388	5388
5°	5209	5289	5375
10°	4798	5026	5337
15°	4308	4678	5248
20°	3771	4279	5106
25°	3185	3822	4927
30°	2566	3326	4727
35°	1887	2802	4504
40°	1178	2260	4270
45°	441	1651	3970
50°	207	1033	3664
55°	150	429	3390
60°	106	226	2933
65°	64	267	2323
70°	58	310	1474
75°	77	309	460
80°	115	381	345
85°	229	608	458

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3970 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	7.1
10°-20°	185.8	18.5
20°-30°	236.7	23.5
30°-40°	220.3	21.9
40°-50°	150.9	15.0
50°-60°	83.1	8.3
60°-70°	39.4	3.9
70°-80°	12.4	1.2
80°-90°	6.3	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°	494.2	49.1
0°-40°	714.4	71.0
0°-60°	948.5	94.2
0°-90°	1006.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1006.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	754	763	765	771	778	70
15°	604	624	656	705	736	168
25°	419	445	503	584	649	191
35°	224	256	333	443	536	139
45°	45	76	170	301	408	43
55°	12	14	36	168	282	11
65°	4	5	16	62	143	4
75°	3	5	12	12	17	3
85°	3	7	8	7	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	782.5	782.5	782.5	782.5	782.5
2.5°	774.8	782.5	776.8	776.8	777.7
5°	753.6	763.3	765.2	771.0	777.7
7.5°	722.8	735.3	745.0	761.3	772.9
10°	686.2	701.6	718.9	745.9	763.3
12.5°	647.6	664.0	690.0	727.6	751.7
15°	604.3	623.5	656.3	705.4	736.3
17.5°	559.9	581.1	621.6	679.4	718.0
20°	514.6	536.8	584.0	648.6	696.8
22.5°	467.4	491.5	543.5	616.8	673.6
25°	419.2	445.2	503.1	584.0	648.6
27.5°	371.0	398.0	461.6	550.3	622.6
30°	322.8	350.8	418.3	515.6	594.6
32.5°	273.7	304.5	375.9	480.9	565.7
35°	224.5	256.3	333.4	443.3	535.8
37.5°	176.4	209.1	292.0	407.7	506.0
40°	131.1	163.8	251.5	372.0	475.1
42.5°	84.8	119.5	209.1	335.4	441.4
45°	45.3	76.1	169.6	300.7	407.7
47.5°	24.1	40.5	132.0	266.0	375.9
50°	19.3	22.2	96.4	231.3	342.1
52.5°	15.4	17.3	61.7	195.6	312.2
55°	12.5	14.5	35.7	167.7	282.4
57.5°	9.6	11.6	20.2	139.7	247.7
60°	7.7	8.7	16.4	111.8	213.0
62.5°	4.8	6.7	16.4	86.7	178.3
65°	3.9	4.8	16.4	61.7	142.6
67.5°	3.9	3.9	16.4	40.5	107.0
70°	2.9	2.9	15.4	26.0	73.2
72.5°	2.9	2.9	13.5	17.3	42.4
75°	2.9	4.8	11.6	12.5	17.3
77.5°	2.9	7.7	10.6	10.6	9.6
80°	2.9	7.7	9.6	8.7	8.7
82.5°	2.9	7.7	7.7	7.7	6.7
85°	2.9	6.7	7.7	6.7	5.8
87.5°	2.9	6.7	6.7	6.7	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	14.90	16.18	15.26	16.49	16.81
	3H	0.00	0.00	0.00	0.00	0.00	15.68	16.82	16.06	17.15	17.52
	4H	0.00	0.00	0.00	0.00	0.00	15.71	16.77	16.11	17.12	17.50
	6H	0.00	0.00	0.00	0.00	0.34	15.66	16.64	16.08	17.01	17.40
	8H	0.00	0.20	0.00	0.59	0.99	15.64	16.56	16.07	16.95	17.36
	12H	0.02	0.90	0.46	1.28	1.72	15.62	16.50	16.06	16.88	17.31
4H	2H	0.00	0.00	0.00	0.10	0.48	14.68	15.74	15.08	16.09	16.47
	3H	0.00	0.42	0.00	0.83	1.23	15.51	16.37	15.92	16.77	17.18
	4H	0.16	0.93	0.59	1.35	1.79	15.54	16.31	15.98	16.73	17.18
	6H	1.65	2.31	2.11	2.76	3.23	15.53	16.19	15.99	16.64	17.11
	8H	2.39	3.01	2.86	3.46	3.93	15.51	16.13	15.98	16.58	17.05
	12H	3.13	3.68	3.62	4.16	4.63	15.51	16.06	16.00	16.54	17.02
8H	4H	2.19	2.81	2.66	3.26	3.73	15.43	16.05	15.90	16.49	16.97
	6H	3.93	4.44	4.44	4.94	5.42	15.43	15.93	15.93	16.43	16.91
	8H	4.88	5.34	5.41	5.85	6.35	15.43	15.89	15.96	16.40	16.90
	12H	5.81	6.21	6.33	6.71	7.28	15.48	15.88	16.00	16.38	16.95
12H	4H	2.49	3.04	2.98	3.52	4.00	15.38	15.93	15.87	16.41	16.89
	6H	4.39	4.84	4.91	5.36	5.85	15.38	15.84	15.91	16.35	16.85
	8H	5.52	5.92	6.04	6.42	6.99	15.42	15.82	15.94	16.32	16.89