

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: P1061822

Luminaire Tested: S125RDRP-S850D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061822
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-S850D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

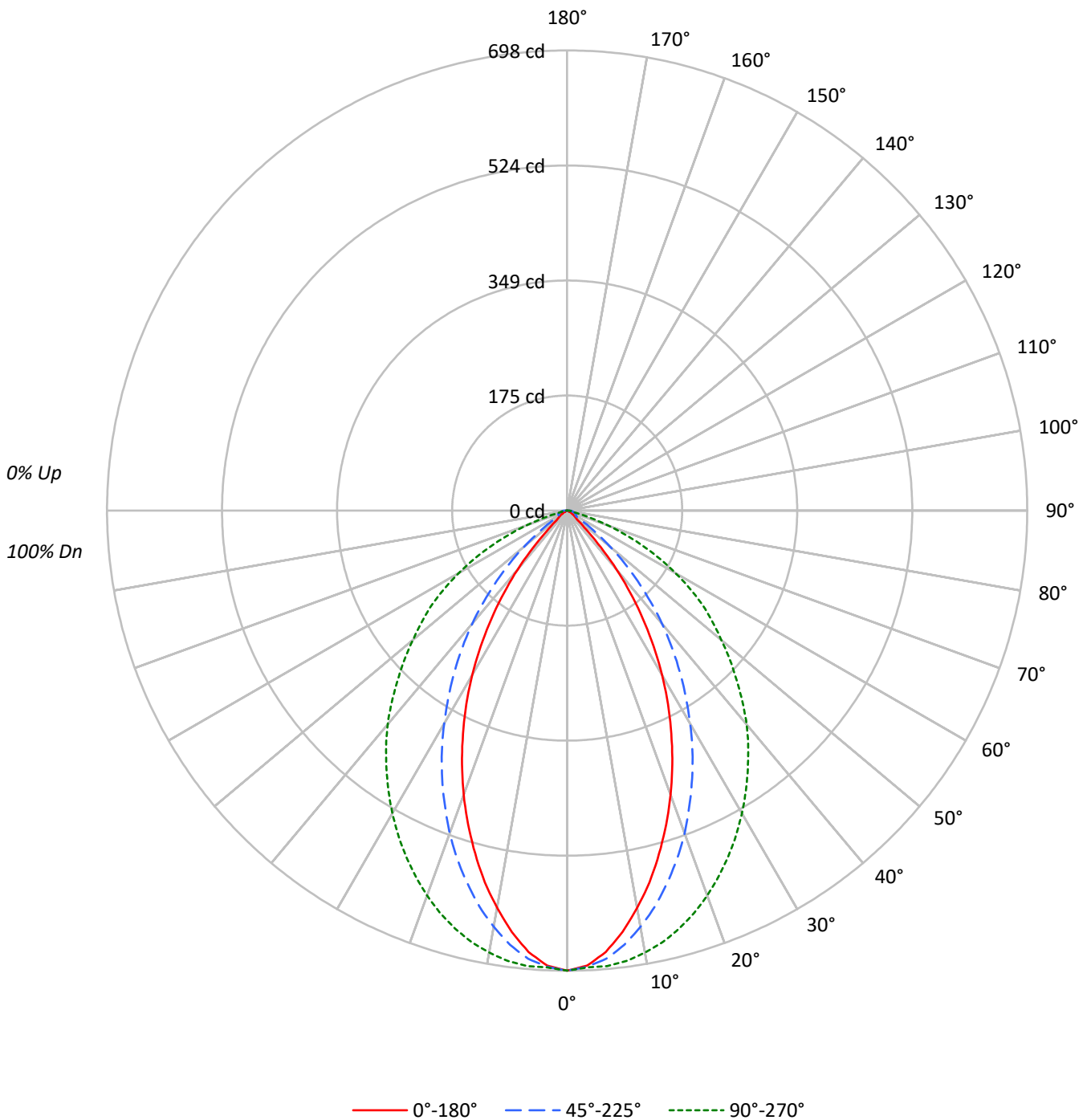
Lumens per Lamp: N/A
Luminaire Lumens: 897.5 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061822

CATALOG NUMBER: S125RDRP-S850D940-X4F0-XX-UDD-BVL-S

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	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°	4805	4805	4805
5°	4645	4716	4793
10°	4278	4482	4758
15°	3841	4171	4680
20°	3362	3816	4552
25°	2840	3408	4393
30°	2289	2965	4215
35°	1683	2499	4016
40°	1051	2016	3808
45°	393	1472	3539
50°	184	920	3268
55°	134	382	3023
60°	95	201	2615
65°	55	238	2072
70°	52	276	1315
75°	69	274	412
80°	103	341	305
85°	205	545	411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3539 cd/sqm

TEST NUMBER: P1061822

CATALOG NUMBER: S125RDRP-S850D940-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	7.1
10°-20°	165.7	18.5
20°-30°	211.0	23.5
30°-40°	196.4	21.9
40°-50°	134.6	15.0
50°-60°	74.1	8.3
60°-70°	35.1	3.9
70°-80°	11.0	1.2
80°-90°	5.7	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°	440.7	49.1
0°-40°	637.1	71.0
0°-60°	845.7	94.2
0°-90°	897.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	897.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	672	681	682	688	694	62
15°	539	556	585	629	656	150
25°	374	397	449	521	578	171
35°	200	229	297	395	478	124
45°	40	68	151	268	364	39
55°	11	13	32	150	252	10
65°	3	4	15	55	127	4
75°	3	4	10	11	16	3
85°	3	6	7	6	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	697.8	697.8	697.8	697.8	697.8
2.5°	690.9	697.8	692.6	692.6	693.5
5°	672.0	680.6	682.3	687.5	693.5
7.5°	644.5	655.7	664.3	678.9	689.2
10°	611.9	625.6	641.1	665.1	680.6
12.5°	577.5	592.1	615.3	648.8	670.3
15°	538.8	556.0	585.2	629.1	656.5
17.5°	499.3	518.2	554.3	605.8	640.2
20°	458.9	478.7	520.8	578.3	621.3
22.5°	416.8	438.3	484.7	550.0	600.7
25°	373.8	397.0	448.6	520.8	578.3
27.5°	330.9	354.9	411.6	490.7	555.1
30°	287.9	312.8	373.0	459.8	530.2
32.5°	244.1	271.6	335.1	428.8	504.4
35°	200.2	228.6	297.3	395.3	477.8
37.5°	157.3	186.5	260.4	363.5	451.2
40°	116.9	146.1	224.3	331.7	423.7
42.5°	75.6	106.6	186.5	299.1	393.6
45°	40.4	67.9	151.2	268.1	363.5
47.5°	21.5	36.1	117.7	237.2	335.1
50°	17.2	19.8	85.9	206.2	305.1
52.5°	13.7	15.5	55.0	174.4	278.4
55°	11.2	12.9	31.8	149.5	251.8
57.5°	8.6	10.3	18.0	124.6	220.9
60°	6.9	7.7	14.6	99.7	189.9
62.5°	4.3	6.0	14.6	77.3	159.0
65°	3.4	4.3	14.6	55.0	127.2
67.5°	3.4	3.4	14.6	36.1	95.4
70°	2.6	2.6	13.7	23.2	65.3
72.5°	2.6	2.6	12.0	15.5	37.8
75°	2.6	4.3	10.3	11.2	15.5
77.5°	2.6	6.9	9.5	9.5	8.6
80°	2.6	6.9	8.6	7.7	7.7
82.5°	2.6	6.9	6.9	6.9	6.0
85°	2.6	6.0	6.9	6.0	5.2
87.5°	2.6	6.0	6.0	6.0	3.4
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	14.50	15.78	14.86	16.10	16.41
	3H	0.00	0.00	0.00	0.00	0.00	15.29	16.42	15.67	16.75	17.12
	4H	0.00	0.00	0.00	0.00	0.00	15.31	16.37	15.71	16.72	17.10
	6H	0.00	0.00	0.00	0.00	0.00	15.27	16.24	15.68	16.61	17.00
	8H	0.00	0.00	0.00	0.19	0.60	15.24	16.16	15.68	16.55	16.96
	12H	0.00	0.51	0.07	0.90	1.33	15.23	16.10	15.66	16.49	16.92
4H	2H	0.00	0.00	0.00	0.00	0.07	14.28	15.34	14.68	15.69	16.07
	3H	0.00	0.01	0.00	0.41	0.82	15.11	15.97	15.52	16.38	16.78
	4H	0.00	0.52	0.18	0.94	1.38	15.14	15.91	15.58	16.33	16.78
	6H	1.26	1.92	1.72	2.37	2.84	15.13	15.80	15.60	16.24	16.71
	8H	2.00	2.62	2.47	3.07	3.54	15.11	15.73	15.59	16.18	16.65
	12H	2.75	3.29	3.24	3.78	4.25	15.12	15.66	15.60	16.15	16.62
8H	4H	1.79	2.41	2.26	2.86	3.33	15.03	15.65	15.50	16.10	16.57
	6H	3.55	4.05	4.05	4.55	5.03	15.03	15.54	15.53	16.03	16.52
	8H	4.50	4.96	5.03	5.47	5.97	15.04	15.49	15.56	16.01	16.50
	12H	5.44	5.84	5.95	6.33	6.91	15.08	15.48	15.60	15.98	16.55
12H	4H	2.09	2.64	2.58	3.12	3.60	14.99	15.53	15.48	16.02	16.49
	6H	4.01	4.46	4.53	4.98	5.47	14.99	15.44	15.51	15.96	16.45
	8H	5.14	5.54	5.66	6.04	6.61	15.03	15.43	15.54	15.92	16.49