

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061813

Luminaire Tested: S125RDR-S850D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061813
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: S125RDR-S850D935-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, 90 CRI LEDS
Ballast/Driver: -

Summary

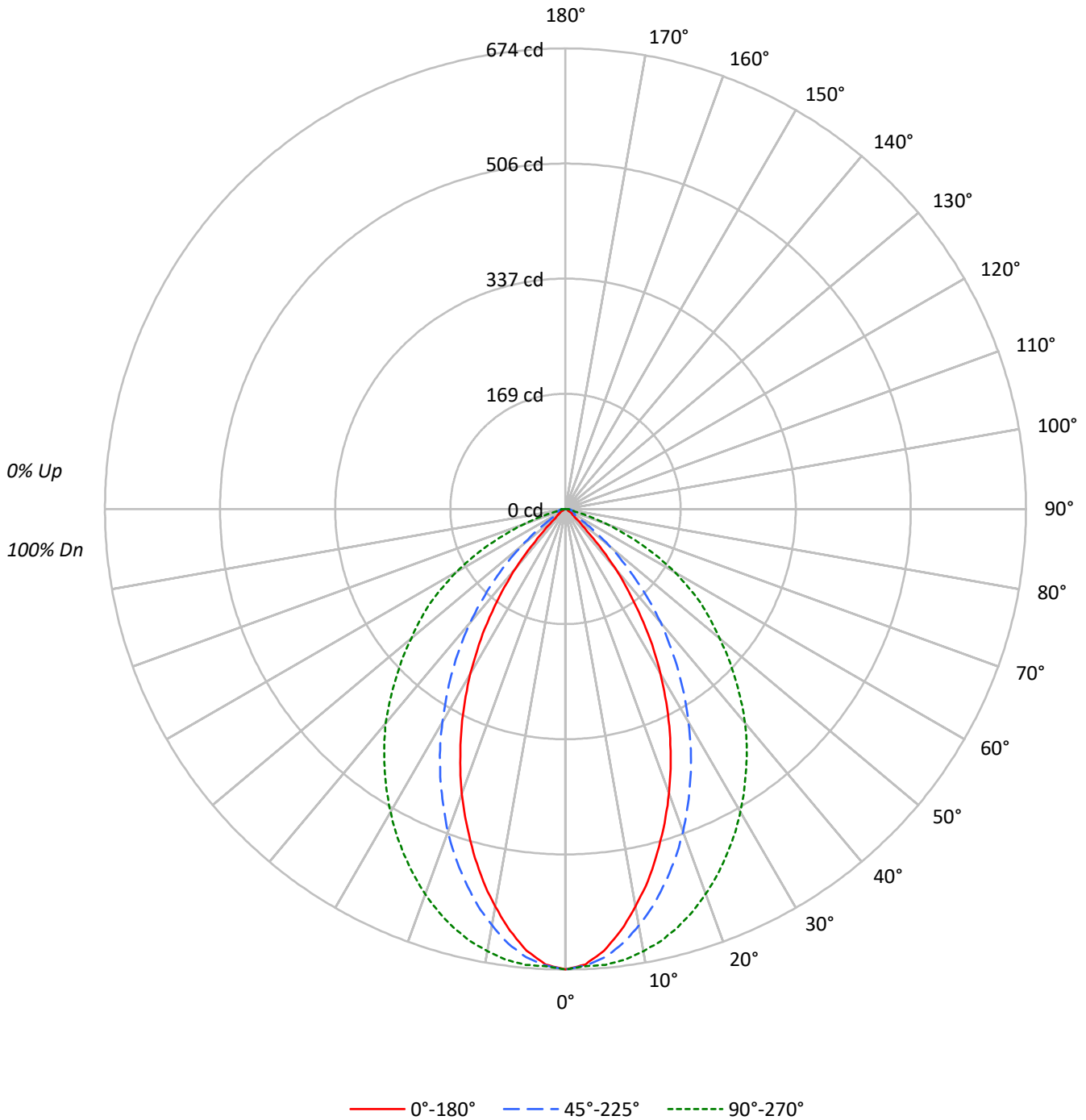
Lumens per Lamp: N/A
Luminaire Lumens: 866.6 lumens
Efficiency: N/A
Efficacy: 33.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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°	4639	4639	4639
5°	4485	4553	4628
10°	4131	4328	4595
15°	3709	4028	4519
20°	3247	3684	4396
25°	2742	3290	4242
30°	2210	2863	4071
35°	1625	2413	3877
40°	1014	1947	3677
45°	380	1422	3418
50°	178	889	3156
55°	130	369	2918
60°	91	194	2526
65°	54	230	2001
70°	50	268	1270
75°	67	266	396
80°	99	329	297
85°	197	521	395

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3418 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	7.1
10°-20°	159.9	18.5
20°-30°	203.8	23.5
30°-40°	189.6	21.9
40°-50°	129.9	15.0
50°-60°	71.5	8.3
60°-70°	33.9	3.9
70°-80°	10.6	1.2
80°-90°	5.4	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°	425.5	49.1
0°-40°	615.1	71.0
0°-60°	816.6	94.2
0°-90°	866.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	866.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	649	657	659	664	670	60
15°	520	537	565	607	634	145
25°	361	383	433	503	558	165
35°	193	221	287	382	461	120
45°	39	66	146	259	351	37
55°	11	12	31	144	243	10
65°	3	4	14	53	123	4
75°	2	4	10	11	15	3
85°	2	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°	673.8	673.8	673.8	673.8	673.8
2.5°	667.1	673.8	668.8	668.8	669.6
5°	648.9	657.2	658.8	663.8	669.6
7.5°	622.3	633.1	641.4	655.5	665.5
10°	590.8	604.1	619.0	642.2	657.2
12.5°	557.6	571.7	594.1	626.5	647.2
15°	520.3	536.9	565.1	607.4	633.9
17.5°	482.1	500.3	535.2	585.0	618.2
20°	443.1	462.2	502.8	558.4	599.9
22.5°	402.4	423.2	468.0	531.0	580.0
25°	360.9	383.3	433.1	502.8	558.4
27.5°	319.5	342.7	397.5	473.8	536.0
30°	278.0	302.0	360.1	443.9	512.0
32.5°	235.7	262.2	323.6	414.1	487.1
35°	193.3	220.7	287.1	381.7	461.3
37.5°	151.8	180.1	251.4	351.0	435.6
40°	112.8	141.1	216.6	320.3	409.1
42.5°	73.0	102.9	180.1	288.8	380.0
45°	39.0	65.6	146.0	258.9	351.0
47.5°	20.7	34.8	113.7	229.0	323.6
50°	16.6	19.1	83.0	199.1	294.6
52.5°	13.3	14.9	53.1	168.4	268.8
55°	10.8	12.4	30.7	144.4	243.1
57.5°	8.3	10.0	17.4	120.3	213.2
60°	6.6	7.5	14.1	96.3	183.4
62.5°	4.1	5.8	14.1	74.7	153.5
65°	3.3	4.1	14.1	53.1	122.8
67.5°	3.3	3.3	14.1	34.8	92.1
70°	2.5	2.5	13.3	22.4	63.1
72.5°	2.5	2.5	11.6	14.9	36.5
75°	2.5	4.1	10.0	10.8	14.9
77.5°	2.5	6.6	9.1	9.1	8.3
80°	2.5	6.6	8.3	7.5	7.5
82.5°	2.5	6.6	6.6	6.6	5.8
85°	2.5	5.8	6.6	5.8	5.0
87.5°	2.5	5.8	5.8	5.8	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)