

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: P1061831

Luminaire Tested: S125RDR-S850D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061831
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-S850D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

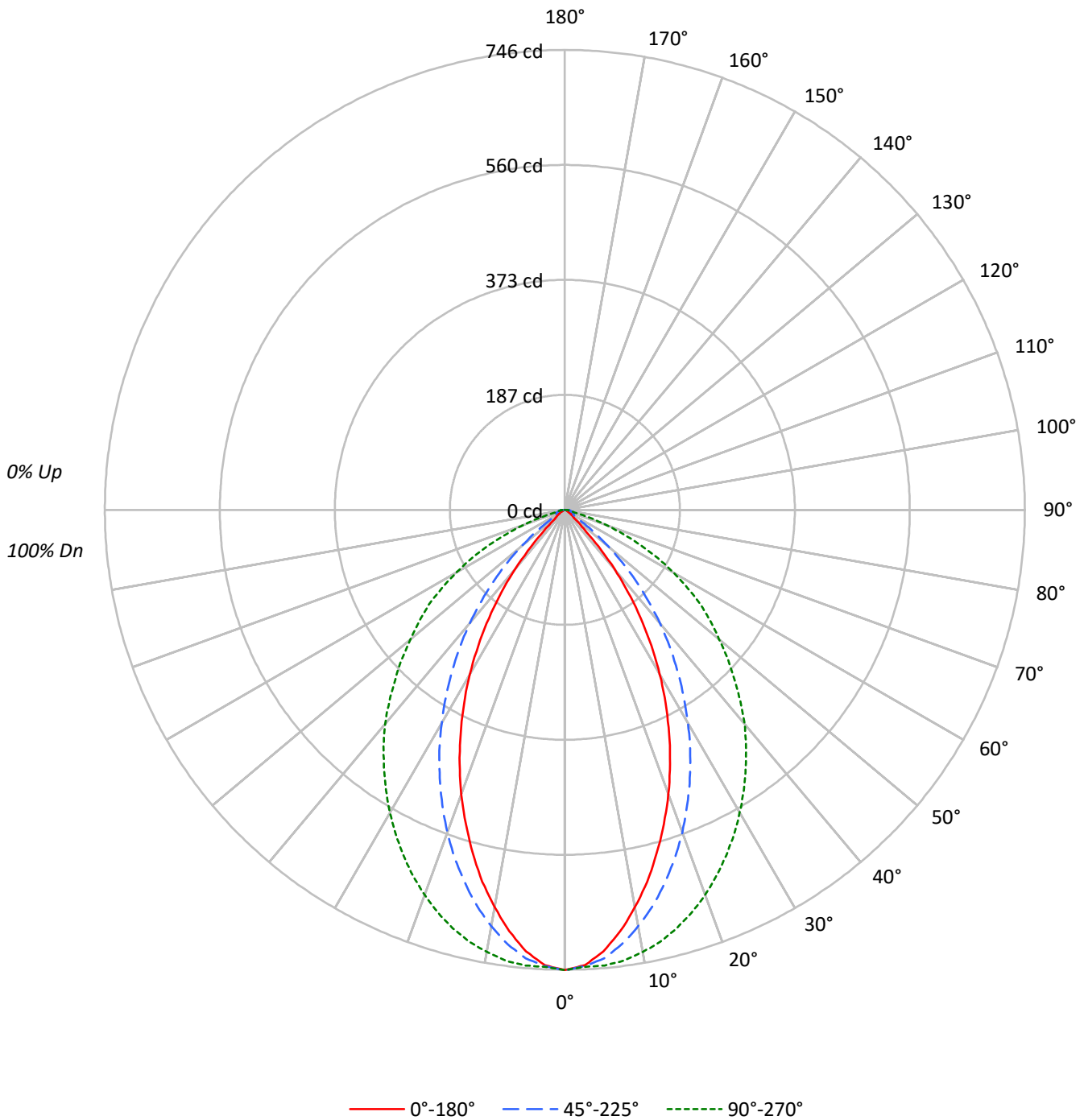
Lumens per Lamp: N/A
Luminaire Lumens: 960.2 lumens
Efficiency: N/A
Efficacy: 37.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	5140	5140	5140
5°	4969	5045	5128
10°	4577	4795	5091
15°	4109	4463	5007
20°	3598	4082	4870
25°	3038	3646	4700
30°	2449	3172	4510
35°	1800	2674	4297
40°	1124	2157	4074
45°	421	1575	3787
50°	197	984	3496
55°	144	408	3234
60°	102	215	2798
65°	60	254	2217
70°	56	296	1407
75°	74	293	439
80°	111	365	329
85°	221	585	434

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3787 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	7.1
10°-20°	177.2	18.5
20°-30°	225.8	23.5
30°-40°	210.1	21.9
40°-50°	144.0	15.0
50°-60°	79.3	8.3
60°-70°	37.5	3.9
70°-80°	11.8	1.2
80°-90°	6.1	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°	471.4	49.1
0°-40°	681.6	71.0
0°-60°	904.8	94.2
0°-90°	960.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	960.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	719	728	730	736	742	67
15°	576	595	626	673	702	161
25°	400	425	480	557	619	183
35°	214	245	318	423	511	133
45°	43	73	162	287	389	41
55°	12	14	34	160	269	11
65°	4	5	16	59	136	4
75°	3	5	11	12	16	3
85°	3	6	7	6	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.5	746.5	746.5	746.5	746.5
2.5°	739.2	746.5	741.0	741.0	741.9
5°	719.0	728.2	730.0	735.5	741.9
7.5°	689.5	701.5	710.7	726.3	737.3
10°	654.6	669.3	685.9	711.6	728.2
12.5°	617.8	633.5	658.3	694.1	717.1
15°	576.5	594.8	626.1	673.0	702.4
17.5°	534.2	554.4	593.0	648.2	684.9
20°	491.0	512.1	557.1	618.7	664.7
22.5°	445.9	468.9	518.5	588.4	642.7
25°	399.9	424.8	479.9	557.1	618.7
27.5°	354.0	379.7	440.4	525.0	593.9
30°	308.0	334.7	399.0	491.9	567.3
32.5°	261.1	290.5	358.6	458.8	539.7
35°	214.2	244.6	318.1	422.9	511.2
37.5°	168.2	199.5	278.6	388.9	482.7
40°	125.0	156.3	240.0	354.9	453.3
42.5°	80.9	114.0	199.5	319.9	421.1
45°	43.2	72.6	161.8	286.8	388.9
47.5°	23.0	38.6	126.0	253.8	358.6
50°	18.4	21.1	91.9	220.7	326.4
52.5°	14.7	16.5	58.8	186.6	297.9
55°	12.0	13.8	34.0	160.0	269.4
57.5°	9.2	11.0	19.3	133.3	236.3
60°	7.4	8.3	15.6	106.6	203.2
62.5°	4.6	6.4	15.6	82.7	170.1
65°	3.7	4.6	15.6	58.8	136.1
67.5°	3.7	3.7	15.6	38.6	102.1
70°	2.8	2.8	14.7	24.8	69.9
72.5°	2.8	2.8	12.9	16.5	40.5
75°	2.8	4.6	11.0	12.0	16.5
77.5°	2.8	7.4	10.1	10.1	9.2
80°	2.8	7.4	9.2	8.3	8.3
82.5°	2.8	7.4	7.4	7.4	6.4
85°	2.8	6.4	7.4	6.4	5.5
87.5°	2.8	6.4	6.4	6.4	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)