

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: P1061780

Luminaire Tested: S125RDR-S850D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D840-X4F0-XX-UDD-SVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

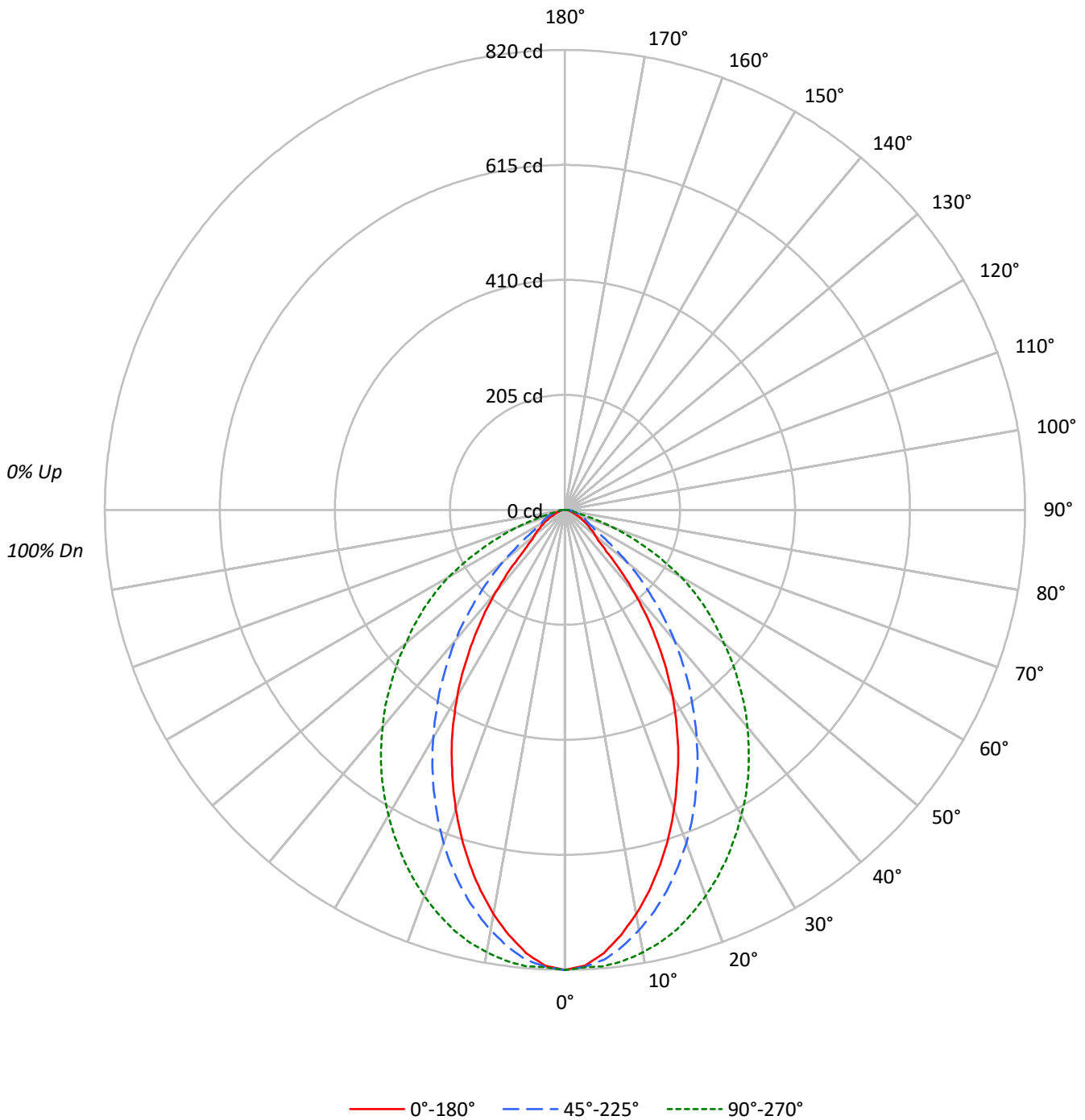
Lumens per Lamp: N/A
Luminaire Lumens: 1184.5 lumens
Efficiency: N/A
Efficacy: 45.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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									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																												
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																												
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70																												
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63																												
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56																												
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51																												
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																												
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42																												
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39																												
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5648	5648	5648
5°	5482	5562	5643
10°	5116	5320	5599
15°	4668	5008	5514
20°	4164	4634	5369
25°	3630	4199	5197
30°	3048	3729	4998
35°	2405	3247	4793
40°	1723	2729	4548
45°	1014	2141	4264
50°	751	1542	3961
55°	630	934	3679
60°	510	683	3283
65°	396	650	2631
70°	332	608	1782
75°	311	543	777
80°	309	539	500
85°	387	695	537

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4264 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	6.4
10°-20°	198.6	16.8
20°-30°	259.5	21.9
30°-40°	252.6	21.3
40°-50°	188.8	15.9
50°-60°	117.1	9.9
60°-70°	61.5	5.2
70°-80°	22.4	1.9
80°-90°	8.5	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°	533.6	45.1
0°-40°	786.2	66.4
0°-60°	1092.1	92.2
0°-90°	1184.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1184.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	793	804	805	810	816	74
15°	655	674	703	745	774	183
25°	478	502	553	628	684	218
35°	286	317	386	490	570	178
45°	104	136	220	344	438	88
55°	52	56	78	202	306	47
65°	24	26	40	86	162	25
75°	12	14	20	22	29	13
85°	5	9	9	9	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	820.3	820.3	820.3	820.3	820.3
2.5°	813.5	820.3	815.4	815.4	816.4
5°	793.1	803.8	804.7	809.6	816.4
7.5°	764.8	777.5	785.3	799.9	810.6
10°	731.7	746.3	760.9	785.3	800.8
12.5°	694.8	712.3	733.7	766.8	789.2
15°	654.9	674.3	702.6	745.4	773.6
17.5°	613.0	633.5	668.5	720.1	754.1
20°	568.3	590.7	632.5	690.9	732.7
22.5°	522.5	547.8	593.6	659.7	709.4
25°	477.8	502.1	552.7	627.6	684.1
27.5°	431.1	456.4	511.8	594.5	656.8
30°	383.4	410.6	469.0	560.5	628.6
32.5°	335.7	363.9	427.2	525.5	600.4
35°	286.1	317.2	386.3	489.5	570.2
37.5°	239.4	272.5	344.5	452.5	538.1
40°	191.7	225.8	303.6	416.5	506.0
42.5°	145.0	180.0	261.8	379.5	473.9
45°	104.1	136.2	219.9	343.5	437.9
47.5°	79.8	98.3	181.0	306.5	405.8
50°	70.1	75.9	144.0	270.5	369.8
52.5°	61.3	65.2	107.0	235.5	338.6
55°	52.5	55.5	77.8	202.4	306.5
57.5°	44.8	47.7	59.4	172.2	273.4
60°	37.0	39.9	49.6	142.1	238.4
62.5°	31.1	32.1	44.8	113.8	199.5
65°	24.3	26.3	39.9	85.6	161.5
67.5°	20.4	21.4	35.0	61.3	124.6
70°	16.5	17.5	30.2	42.8	88.5
72.5°	14.6	14.6	25.3	31.1	56.4
75°	11.7	13.6	20.4	22.4	29.2
77.5°	9.7	13.6	17.5	16.5	15.6
80°	7.8	12.6	13.6	13.6	12.6
82.5°	6.8	10.7	11.7	10.7	9.7
85°	4.9	8.8	8.8	8.8	6.8
87.5°	3.9	7.8	6.8	6.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)