

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: P1061768

Luminaire Tested: S125RDR-S850D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S125RDR-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

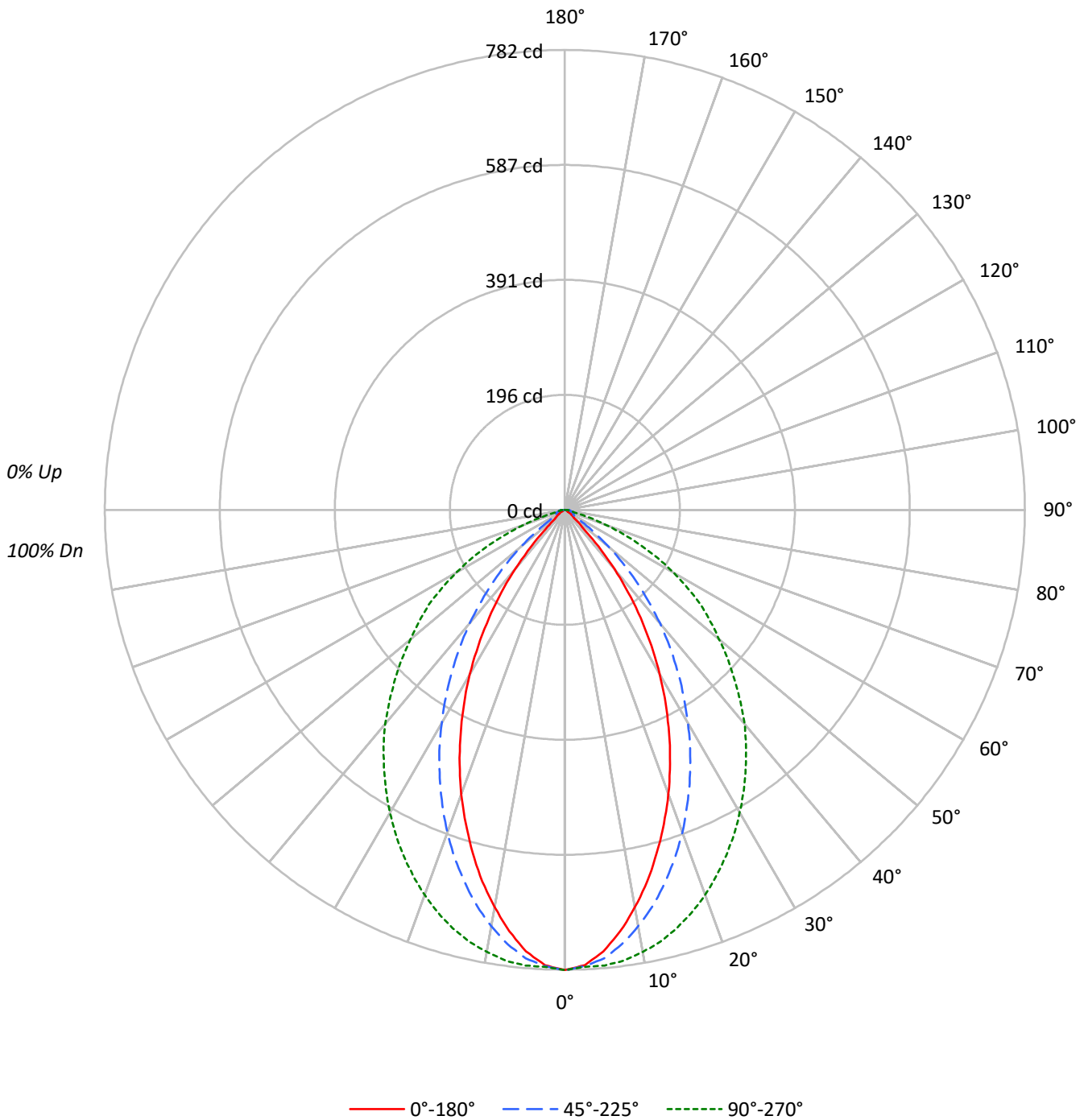
Lumens per Lamp: N/A
Luminaire Lumens: 1006.5 lumens
Efficiency: N/A
Efficacy: 39.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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				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

(END OF REPORT)