

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: P1061707

Luminaire Tested: S125RDR-S610D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S610D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

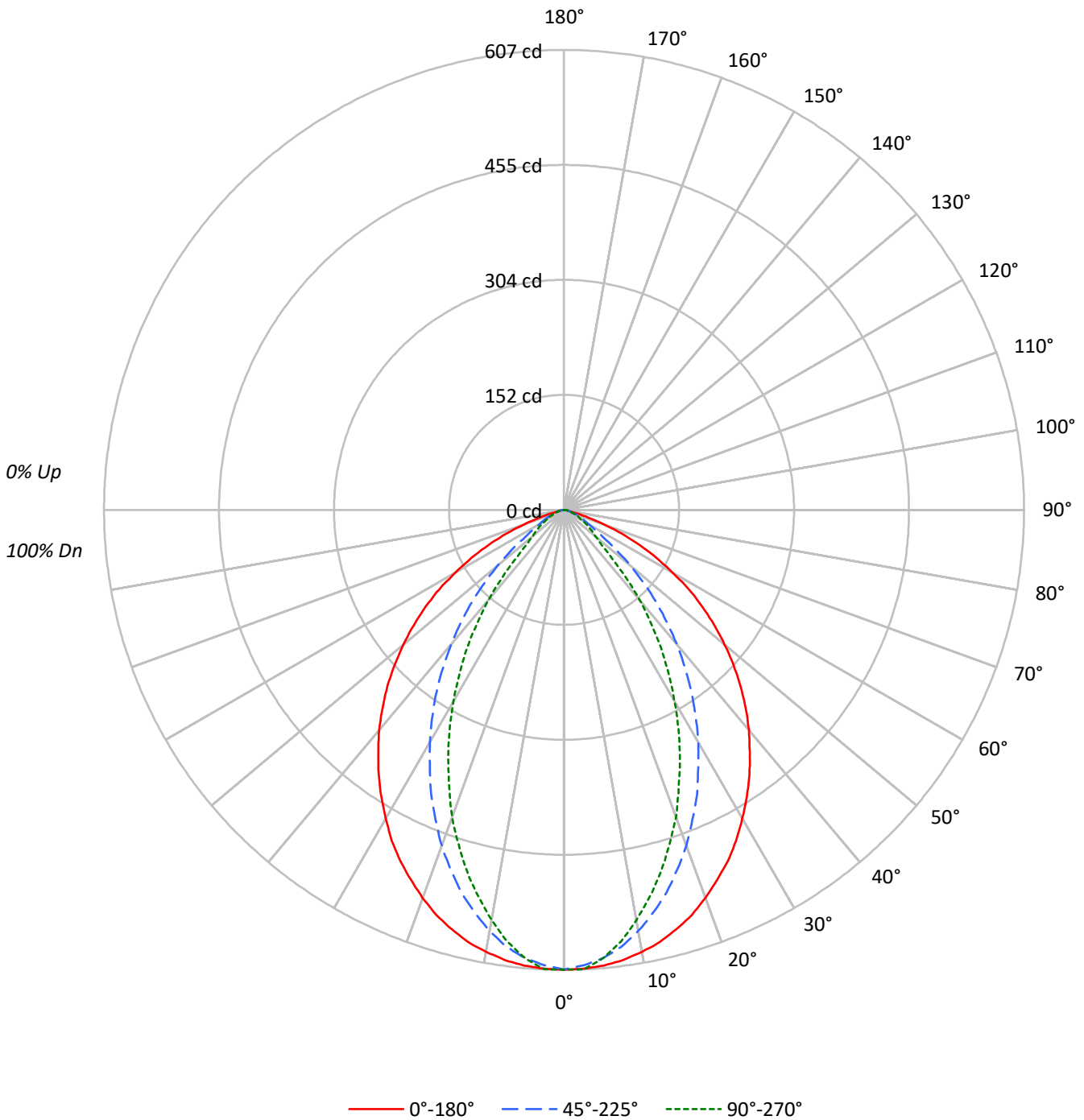
Lumens per Lamp: N/A
Luminaire Lumens: 877.7 lumens
Efficiency: N/A
Efficacy: 44.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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

TEST NUMBER: P1061707

CATALOG NUMBER: S125RDR-S610D850-X4F0-XX-UDD-SVL-B

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	97	98	96	95	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52				
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43				
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4179	4179	4179
5°	4173	4104	4104
10°	4140	3947	3844
15°	4084	3727	3523
20°	3995	3458	3164
25°	3884	3152	2748
30°	3740	2814	2318
35°	3584	2463	1879
40°	3410	2079	1393
45°	3206	1667	841
50°	2965	1222	578
55°	2676	750	481
60°	2272	510	383
65°	1797	389	301
70°	1133	280	248
75°	370	205	205
80°	123	155	182
85°	63	118	118

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3206 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	6.4
10°-20°	148.2	16.9
20°-30°	195.0	22.2
30°-40°	191.6	21.8
40°-50°	144.9	16.5
50°-60°	87.9	10.0
60°-70°	41.5	4.7
70°-80°	10.8	1.2
80°-90°	1.6	0.2
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°	399.3	45.5
0°-40°	590.9	67.3
0°-60°	823.7	93.9
0°-90°	877.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	877.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	604	602	594	595	594	57
15°	573	558	523	503	494	161
25°	511	473	415	376	362	235
35°	426	369	293	241	224	266
45°	329	259	171	109	86	254
55°	223	153	62	42	40	198
65°	110	56	24	20	18	109
75°	14	9	8	8	8	21
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	606.9	606.9	606.9	606.9	606.9
2.5°	606.1	606.1	601.5	606.9	606.9
5°	603.8	602.3	593.8	594.6	593.8
7.5°	599.2	596.1	581.4	577.6	574.5
10°	592.2	586.1	564.5	555.2	549.8
12.5°	584.5	573.7	544.4	531.3	522.8
15°	573.0	557.5	522.8	502.8	494.3
17.5°	560.6	538.3	497.4	473.5	462.7
20°	545.2	519.0	471.9	442.6	431.8
22.5°	528.2	497.4	442.6	410.3	395.6
25°	511.3	472.7	414.9	376.3	361.7
27.5°	492.0	448.0	383.3	343.2	327.0
30°	470.4	423.4	354.0	312.3	291.5
32.5°	448.8	397.9	323.1	277.6	256.8
35°	426.4	369.4	293.0	241.4	223.6
37.5°	402.5	342.4	262.2	208.2	187.4
40°	379.4	315.4	231.3	174.3	155.0
42.5°	354.7	288.4	200.5	141.1	119.5
45°	329.3	259.1	171.2	108.7	86.4
47.5°	303.1	232.9	141.9	80.2	64.8
50°	276.8	205.1	114.1	59.4	54.0
52.5°	249.9	178.1	86.4	49.4	47.0
55°	222.9	152.7	62.5	42.4	40.1
57.5°	195.1	124.9	47.0	36.2	33.9
60°	165.0	100.2	37.0	30.1	27.8
62.5°	137.3	78.7	30.1	24.7	23.1
65°	110.3	56.3	23.9	20.0	18.5
67.5°	82.5	37.8	18.5	15.4	15.4
70°	56.3	24.7	13.9	12.3	12.3
72.5°	33.9	14.7	10.0	10.0	10.0
75°	13.9	9.3	7.7	7.7	7.7
77.5°	4.6	5.4	5.4	6.2	6.2
80°	3.1	3.1	3.9	4.6	4.6
82.5°	1.5	2.3	2.3	3.1	3.1
85°	0.8	0.8	1.5	1.5	1.5
87.5°	0.0	0.0	0.0	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)