

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1062113

Luminaire Tested: S125RDR-H610D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062113
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-H610D850-X4F0-XX-UDD-SVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

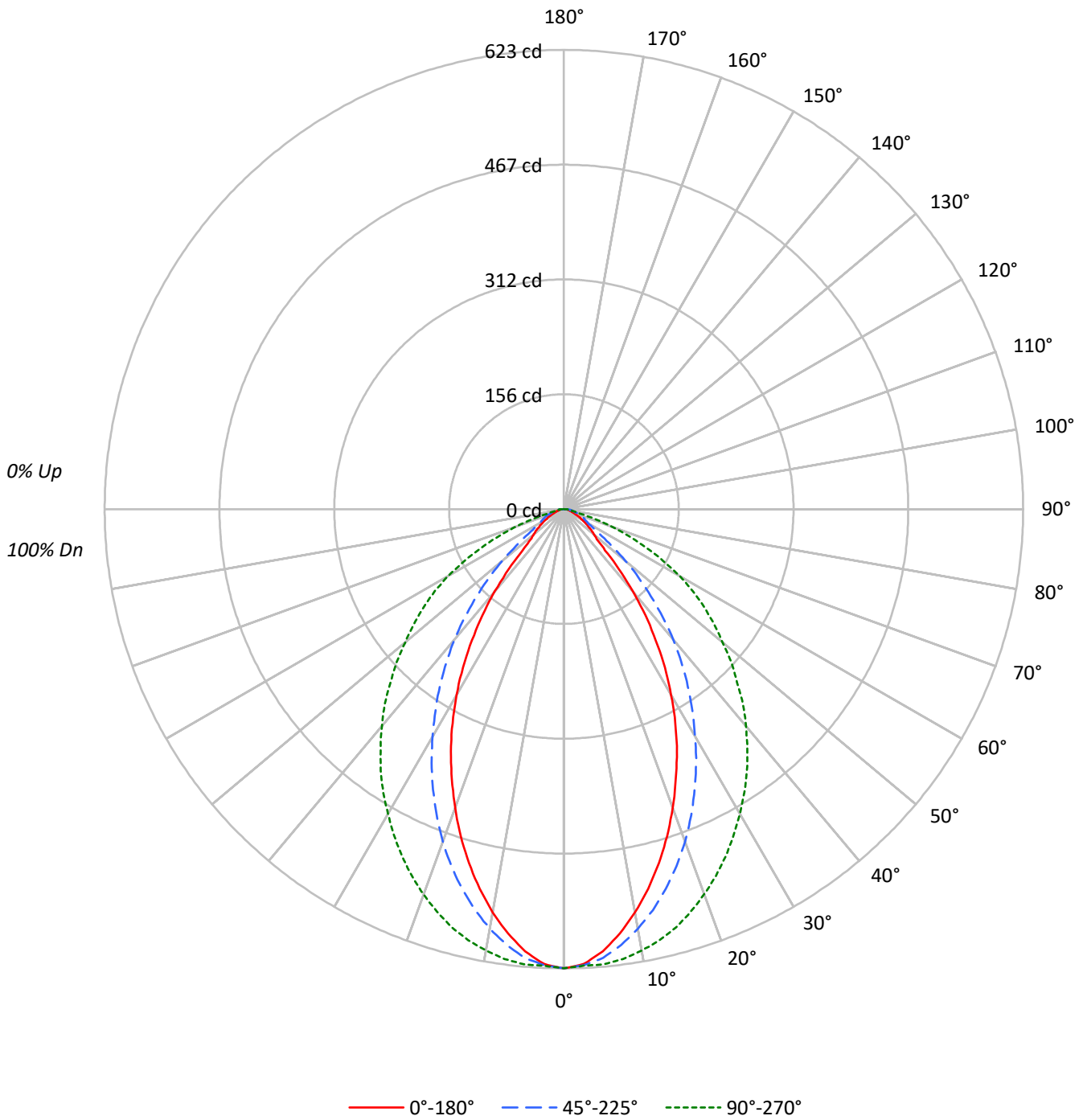
Lumens per Lamp: N/A
Luminaire Lumens: 899.4 lumens
Efficiency: N/A
Efficacy: 51.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63				63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4289	4289	4289
5°	4162	4224	4284
10°	3884	4040	4252
15°	3545	3803	4187
20°	3162	3519	4077
25°	2756	3188	3946
30°	2314	2831	3795
35°	1826	2465	3640
40°	1309	2072	3453
45°	770	1626	3238
50°	570	1172	3008
55°	479	709	2793
60°	387	519	2492
65°	301	494	1999
70°	254	461	1353
75°	237	412	591
80°	234	408	381
85°	292	521	411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3238 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	6.4
10°-20°	150.8	16.8
20°-30°	197.0	21.9
30°-40°	191.8	21.3
40°-50°	143.3	15.9
50°-60°	88.9	9.9
60°-70°	46.7	5.2
70°-80°	17.0	1.9
80°-90°	6.4	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°	405.2	45.1
0°-40°	597.0	66.4
0°-60°	829.3	92.2
0°-90°	899.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	899.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	623	623	623	623	623	
5°	602	610	611	615	620	56
15°	497	512	534	566	587	139
25°	363	381	420	477	519	166
35°	217	241	293	372	433	135
45°	79	103	167	261	332	67
55°	40	42	59	154	233	36
65°	18	20	30	65	123	19
75°	9	10	16	17	22	10
85°	4	7	7	7	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	622.9	622.9	622.9	622.9	622.9
2.5°	617.7	622.9	619.2	619.2	619.9
5°	602.2	610.3	611.1	614.7	619.9
7.5°	580.8	590.4	596.3	607.4	615.5
10°	555.6	566.7	577.8	596.3	608.1
12.5°	527.6	540.9	557.1	582.2	599.2
15°	497.3	512.0	533.5	566.0	587.4
17.5°	465.5	481.0	507.6	546.8	572.6
20°	431.5	448.5	480.3	524.6	556.4
22.5°	396.8	416.0	450.7	501.0	538.6
25°	362.8	381.3	419.7	476.6	519.4
27.5°	327.3	346.5	388.7	451.5	498.7
30°	291.1	311.8	356.1	425.6	477.3
32.5°	254.9	276.3	324.4	399.0	455.9
35°	217.2	240.9	293.3	371.7	433.0
37.5°	181.8	206.9	261.6	343.6	408.6
40°	145.6	171.4	230.5	316.2	384.2
42.5°	110.1	136.7	198.8	288.2	359.8
45°	79.1	103.4	167.0	260.8	332.5
47.5°	60.6	74.6	137.4	232.7	308.1
50°	53.2	57.6	109.4	205.4	280.8
52.5°	46.5	49.5	81.3	178.8	257.1
55°	39.9	42.1	59.1	153.7	232.7
57.5°	34.0	36.2	45.1	130.8	207.6
60°	28.1	30.3	37.7	107.9	181.0
62.5°	23.6	24.4	34.0	86.4	151.5
65°	18.5	19.9	30.3	65.0	122.7
67.5°	15.5	16.3	26.6	46.5	94.6
70°	12.6	13.3	22.9	32.5	67.2
72.5°	11.1	11.1	19.2	23.6	42.9
75°	8.9	10.3	15.5	17.0	22.2
77.5°	7.4	10.3	13.3	12.6	11.8
80°	5.9	9.6	10.3	10.3	9.6
82.5°	5.2	8.1	8.9	8.1	7.4
85°	3.7	6.6	6.6	6.6	5.2
87.5°	3.0	5.9	5.2	5.2	3.7
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	4.84	6.19	5.21	6.51	6.82	14.55	15.90	14.92	16.21	16.53
	3H	5.69	6.88	6.07	7.21	7.58	15.46	16.66	15.84	16.99	17.35
	4H	6.05	7.16	6.45	7.51	7.90	15.56	16.68	15.96	17.03	17.41
	6H	6.42	7.45	6.83	7.82	8.21	15.55	16.57	15.96	16.94	17.34
	8H	6.60	7.57	7.03	7.96	8.37	15.53	16.51	15.96	16.90	17.30
	12H	6.76	7.69	7.19	8.08	8.51	15.52	16.45	15.95	16.83	17.26
4H	2H	5.67	6.79	6.08	7.14	7.52	14.40	15.52	14.80	15.87	16.25
	3H	6.73	7.65	7.15	8.05	8.45	15.39	16.30	15.80	16.71	17.11
	4H	7.19	8.01	7.62	8.42	8.87	15.52	16.34	15.95	16.75	17.20
	6H	7.74	8.45	8.21	8.90	9.36	15.55	16.26	16.01	16.70	17.17
	8H	8.00	8.66	8.47	9.11	9.58	15.55	16.21	16.02	16.66	17.13
	12H	8.25	8.83	8.73	9.31	9.79	15.56	16.14	16.05	16.63	17.10
8H	4H	7.74	8.40	8.21	8.85	9.32	15.44	16.10	15.91	16.55	17.02
	6H	8.52	9.06	9.02	9.55	10.03	15.50	16.04	16.00	16.54	17.02
	8H	8.93	9.42	9.45	9.93	10.42	15.53	16.02	16.05	16.53	17.02
	12H	9.35	9.78	9.86	10.27	10.84	15.58	16.01	16.10	16.51	17.08
12H	4H	7.80	8.39	8.29	8.87	9.34	15.41	15.99	15.89	16.47	16.95
	6H	8.66	9.15	9.18	9.66	10.15	15.47	15.95	15.99	16.47	16.96
	8H	9.19	9.62	9.70	10.11	10.68	15.53	15.96	16.05	16.46	17.03