

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: P1062200

Luminaire Tested: S125RDR-H850D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062200
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-H850D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

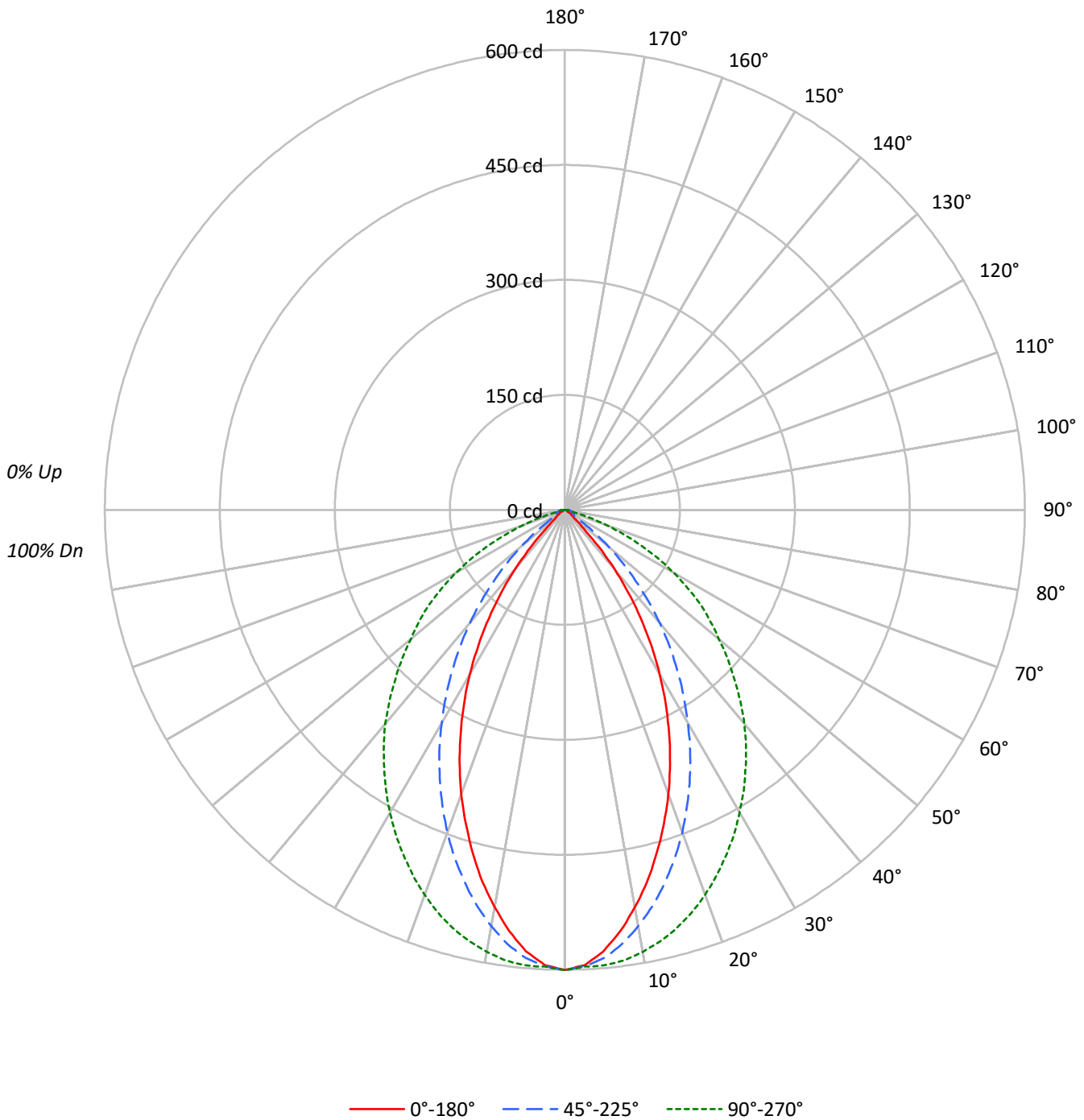
Lumens per Lamp: N/A
Luminaire Lumens: 772.1 lumens
Efficiency: N/A
Efficacy: 32.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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°	4133	4133	4133
5°	3996	4057	4123
10°	3680	3856	4093
15°	3304	3589	4026
20°	2893	3283	3916
25°	2443	2932	3780
30°	1969	2551	3626
35°	1448	2150	3455
40°	903	1735	3276
45°	338	1267	3045
50°	159	792	2811
55°	115	329	2600
60°	81	174	2250
65°	49	205	1782
70°	44	238	1131
75°	59	237	354
80°	87	293	266
85°	174	466	348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3045 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.0	7.1
10°-20°	142.5	18.5
20°-30°	181.5	23.5
30°-40°	169.0	21.9
40°-50°	115.8	15.0
50°-60°	63.8	8.3
60°-70°	30.2	3.9
70°-80°	9.5	1.2
80°-90°	4.9	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°	379.1	49.1
0°-40°	548.1	71.0
0°-60°	727.6	94.2
0°-90°	772.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	772.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	600	600	600	600	600	
5°	578	586	587	591	597	54
15°	464	478	504	541	565	129
25°	322	342	386	448	498	147
35°	172	197	256	340	411	107
45°	35	58	130	231	313	33
55°	10	11	27	129	217	9
65°	3	4	13	47	109	3
75°	2	4	9	10	13	2
85°	2	5	6	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	600.3	600.3	600.3	600.3	600.3
2.5°	594.4	600.3	595.9	595.9	596.6
5°	578.1	585.5	587.0	591.4	596.6
7.5°	554.5	564.1	571.5	584.0	592.9
10°	526.4	538.2	551.5	572.2	585.5
12.5°	496.8	509.4	529.3	558.2	576.6
15°	463.5	478.3	503.5	541.2	564.8
17.5°	429.5	445.8	476.8	521.2	550.8
20°	394.8	411.8	448.0	497.5	534.5
22.5°	358.6	377.0	417.0	473.1	516.8
25°	321.6	341.6	385.9	448.0	497.5
27.5°	284.6	305.3	354.1	422.1	477.6
30°	247.7	269.1	320.9	395.5	456.1
32.5°	210.0	233.6	288.3	368.9	434.0
35°	172.3	196.7	255.8	340.1	411.0
37.5°	135.3	160.4	224.0	312.7	388.1
40°	100.5	125.7	193.0	285.4	364.5
42.5°	65.1	91.7	160.4	257.3	338.6
45°	34.7	58.4	130.1	230.7	312.7
47.5°	18.5	31.1	101.3	204.0	288.3
50°	14.8	17.0	73.9	177.4	262.4
52.5°	11.8	13.3	47.3	150.1	239.5
55°	9.6	11.1	27.4	128.6	216.6
57.5°	7.4	8.9	15.5	107.2	190.0
60°	5.9	6.7	12.6	85.8	163.4
62.5°	3.7	5.2	12.6	66.5	136.8
65°	3.0	3.7	12.6	47.3	109.4
67.5°	3.0	3.0	12.6	31.1	82.1
70°	2.2	2.2	11.8	20.0	56.2
72.5°	2.2	2.2	10.4	13.3	32.5
75°	2.2	3.7	8.9	9.6	13.3
77.5°	2.2	5.9	8.1	8.1	7.4
80°	2.2	5.9	7.4	6.7	6.7
82.5°	2.2	5.9	5.9	5.9	5.2
85°	2.2	5.2	5.9	5.2	4.4
87.5°	2.2	5.2	5.2	5.2	3.0
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	0.00	0.00	0.00	0.00	0.00	13.98	15.26	14.34	15.57	15.89
	3H	0.00	0.00	0.00	0.00	0.00	14.76	15.90	15.14	16.23	16.60
	4H	0.00	0.00	0.00	0.00	0.00	14.79	15.85	15.19	16.20	16.58
	6H	0.00	0.00	0.00	0.00	0.00	14.75	15.72	15.16	16.09	16.48
	8H	0.00	0.00	0.00	0.00	0.05	14.72	15.64	15.15	16.03	16.44
	12H	0.00	0.00	0.00	0.34	0.77	14.70	15.58	15.14	15.97	16.40
4H	2H	0.00	0.00	0.00	0.00	0.00	13.76	14.82	14.16	15.17	15.55
	3H	0.00	0.00	0.00	0.00	0.31	14.59	15.45	15.00	15.86	16.26
	4H	0.00	0.01	0.00	0.43	0.87	14.62	15.39	15.06	15.81	16.26
	6H	0.72	1.38	1.18	1.83	2.30	14.61	15.27	15.07	15.72	16.19
	8H	1.45	2.07	1.93	2.52	2.99	14.59	15.21	15.06	15.66	16.13
	12H	2.19	2.74	2.68	3.22	3.70	14.60	15.14	15.08	15.63	16.10
8H	4H	1.27	1.89	1.74	2.34	2.81	14.51	15.13	14.98	15.58	16.05
	6H	3.01	3.51	3.51	4.01	4.49	14.51	15.02	15.01	15.51	15.99
	8H	3.96	4.41	4.48	4.93	5.42	14.52	14.97	15.04	15.49	15.98
	12H	4.89	5.29	5.41	5.79	6.36	14.56	14.96	15.08	15.46	16.03
12H	4H	1.57	2.12	2.06	2.61	3.08	14.47	15.01	14.95	15.50	15.97
	6H	3.47	3.92	3.99	4.44	4.93	14.46	14.92	14.99	15.43	15.93
	8H	4.59	5.00	5.11	5.49	6.06	14.50	14.91	15.02	15.40	15.97