

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: P1062222

Luminaire Tested: S125RDR-H850D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062222
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H850D935-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

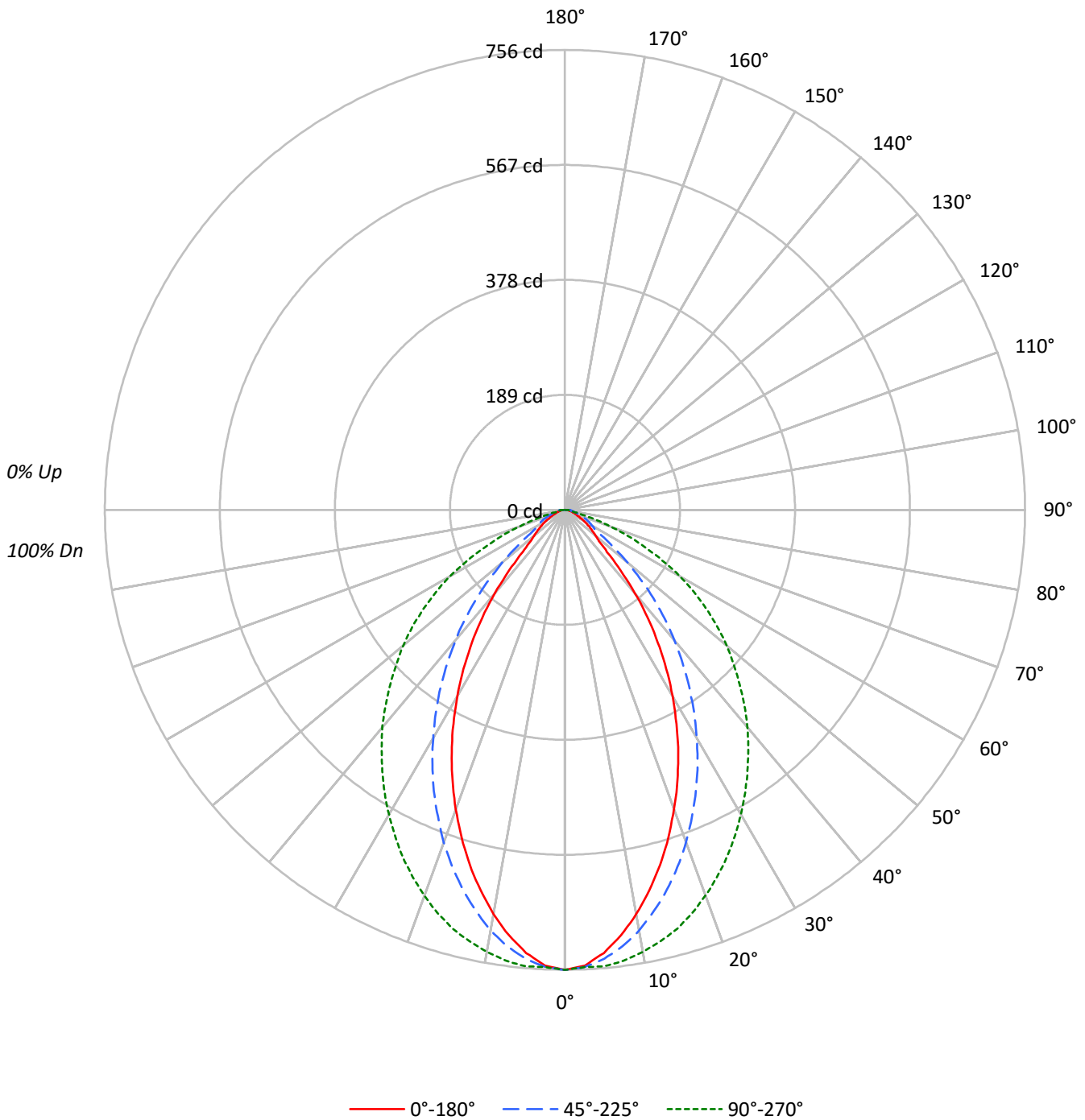
Lumens per Lamp: N/A
Luminaire Lumens: 1095.2 lumens
Efficiency: N/A
Efficacy: 46.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	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	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	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	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5206	5206	5206
5°	5054	5120	5204
10°	4719	4910	5157
15°	4307	4610	5080
20°	3839	4262	4946
25°	3345	3870	4786
30°	2810	3443	4599
35°	2236	2992	4397
40°	1611	2513	4196
45°	954	1995	3951
50°	706	1420	3718
55°	598	877	3404
60°	487	708	2999
65°	380	655	2369
70°	324	566	1584
75°	298	492	641
80°	317	511	444
85°	379	758	506

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3951 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	6.4
10°-20°	183.0	16.7
20°-30°	239.2	21.8
30°-40°	233.0	21.3
40°-50°	174.8	16.0
50°-60°	109.6	10.0
60°-70°	57.0	5.2
70°-80°	20.7	1.9
80°-90°	8.2	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°	491.9	44.9
0°-40°	725.0	66.2
0°-60°	1009.3	92.2
0°-90°	1095.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1095.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	731	741	741	746	753	68
15°	604	622	647	687	713	169
25°	440	464	509	578	630	201
35°	266	294	356	451	523	165
45°	98	127	205	317	406	82
55°	50	52	73	191	284	44
65°	23	25	40	77	145	24
75°	11	15	18	19	24	12
85°	5	8	10	9	6	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	756.1	756.1	756.1	756.1	756.1
2.5°	749.7	756.9	752.1	752.1	752.1
5°	731.2	740.8	740.8	746.5	752.9
7.5°	705.5	716.7	724.0	737.6	747.3
10°	675.0	688.6	702.3	724.8	737.6
12.5°	640.4	656.5	675.8	707.1	726.4
15°	604.2	621.9	646.8	687.0	712.7
17.5°	564.9	585.8	615.5	663.7	695.0
20°	523.9	544.8	581.7	636.4	675.0
22.5°	482.9	505.4	545.6	607.5	653.3
25°	440.3	464.4	509.4	578.5	630.0
27.5°	396.9	421.8	471.7	548.8	604.2
30°	353.5	379.3	433.1	516.7	578.5
32.5°	310.2	337.5	394.5	483.7	551.2
35°	266.0	294.1	356.0	450.8	523.1
37.5°	223.4	251.5	317.4	417.0	495.0
40°	179.2	209.7	279.6	383.3	466.8
42.5°	135.8	167.1	241.9	349.5	436.3
45°	98.0	127.0	204.9	316.6	405.8
47.5°	75.5	91.6	167.1	282.8	376.0
50°	65.9	70.7	132.6	251.5	347.1
52.5°	57.0	60.3	99.6	222.6	315.8
55°	49.8	52.2	73.1	191.2	283.6
57.5°	41.8	45.0	57.9	160.7	250.7
60°	35.4	37.0	51.4	132.6	217.8
62.5°	28.9	30.5	45.8	104.5	180.8
65°	23.3	24.9	40.2	77.1	145.4
67.5°	19.3	20.1	33.7	54.6	111.7
70°	16.1	16.9	28.1	37.8	78.7
72.5°	13.7	16.1	22.5	27.3	49.8
75°	11.2	15.3	18.5	19.3	24.1
77.5°	9.6	14.5	15.3	15.3	13.7
80°	8.0	12.1	12.9	12.1	11.2
82.5°	6.4	9.6	10.4	10.4	8.8
85°	4.8	8.0	9.6	8.8	6.4
87.5°	3.2	7.2	8.0	7.2	4.8
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	5.65	7.00	6.02	7.32	7.63	15.26	16.61	15.63	16.93	17.24
	3H	6.51	7.71	6.89	8.04	8.40	16.10	17.30	16.48	17.63	18.00
	4H	6.93	8.05	7.34	8.40	8.79	16.18	17.30	16.58	17.65	18.03
	6H	7.36	8.39	7.77	8.76	9.15	16.16	17.19	16.57	17.56	17.95
	8H	7.54	8.51	7.97	8.90	9.31	16.15	17.12	16.58	17.51	17.92
	12H	7.70	8.63	8.13	9.01	9.44	16.14	17.07	16.57	17.45	17.88
4H	2H	6.61	7.73	7.02	8.08	8.47	15.13	16.25	15.53	16.60	16.98
	3H	7.67	8.58	8.08	8.99	9.39	16.04	16.95	16.45	17.36	17.76
	4H	8.23	9.05	8.67	9.47	9.91	16.14	16.96	16.57	17.38	17.82
	6H	8.83	9.54	9.29	9.98	10.45	16.17	16.87	16.63	17.32	17.78
	8H	9.07	9.73	9.54	10.17	10.64	16.17	16.83	16.63	17.27	17.74
	12H	9.29	9.88	9.78	10.36	10.83	16.18	16.76	16.66	17.25	17.72
8H	4H	8.70	9.36	9.17	9.81	10.28	16.06	16.72	16.53	17.17	17.64
	6H	9.52	10.06	10.02	10.55	11.03	16.12	16.66	16.62	17.15	17.64
	8H	9.89	10.38	10.41	10.89	11.39	16.15	16.64	16.67	17.15	17.64
	12H	10.28	10.71	10.80	11.21	11.78	16.21	16.64	16.73	17.14	17.71
12H	4H	8.76	9.34	9.24	9.82	10.30	16.03	16.61	16.52	17.10	17.57
	6H	9.64	10.13	10.16	10.64	11.13	16.08	16.57	16.61	17.09	17.58
	8H	10.12	10.55	10.64	11.05	11.62	16.16	16.58	16.67	17.08	17.65