

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: P1062211

Luminaire Tested: S125RDR-H850D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062211
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-H850D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

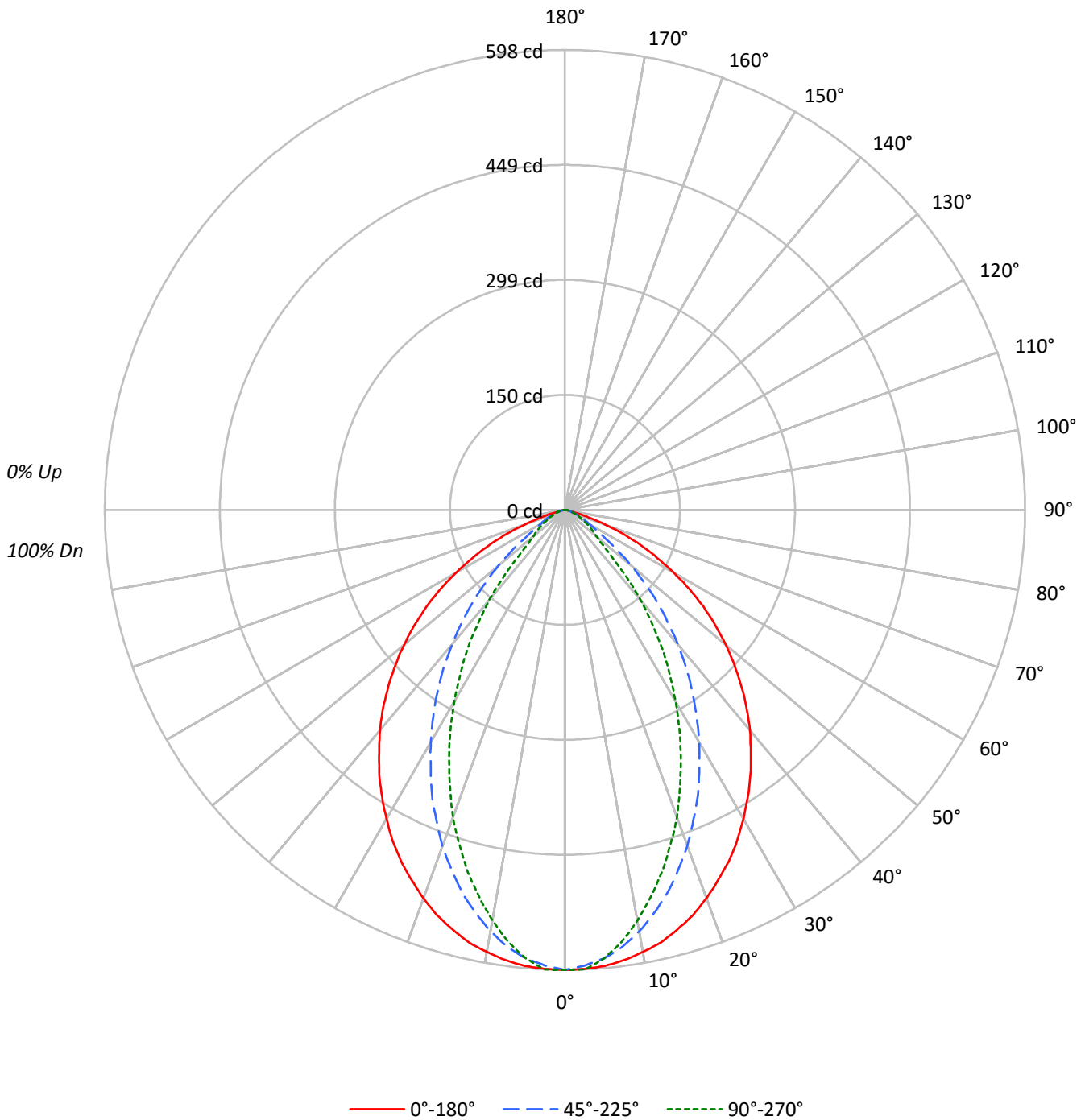
Lumens per Lamp: N/A
Luminaire Lumens: 865.3 lumens
Efficiency: N/A
Efficacy: 36.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				
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°	4119	4119	4119
5°	4114	4046	4046
10°	4082	3891	3789
15°	4026	3674	3474
20°	3938	3409	3119
25°	3829	3107	2708
30°	3687	2774	2285
35°	3534	2428	1853
40°	3362	2050	1373
45°	3161	1644	829
50°	2923	1205	570
55°	2637	739	474
60°	2240	503	377
65°	1771	384	297
70°	1117	276	246
75°	364	202	202
80°	119	151	182
85°	63	118	118

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3161 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	6.4
10°-20°	146.1	16.9
20°-30°	192.2	22.2
30°-40°	188.9	21.8
40°-50°	142.9	16.5
50°-60°	86.6	10.0
60°-70°	40.9	4.7
70°-80°	10.7	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°	393.7	45.5
0°-40°	582.6	67.3
0°-60°	812.1	93.9
0°-90°	865.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	865.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	595	594	585	586	585	56
15°	565	550	515	496	487	159
25°	504	466	409	371	356	232
35°	420	364	289	238	220	263
45°	325	255	169	107	85	250
55°	220	150	62	42	40	196
65°	109	56	24	20	18	107
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°	598.3	598.3	598.3	598.3	598.3
2.5°	597.5	597.5	593.0	598.3	598.3
5°	595.3	593.7	585.4	586.1	585.4
7.5°	590.7	587.7	573.2	569.4	566.4
10°	583.9	577.8	556.5	547.4	542.0
12.5°	576.2	565.6	536.7	523.8	515.4
15°	564.8	549.6	515.4	495.7	487.3
17.5°	552.7	530.6	490.3	466.8	456.1
20°	537.5	511.6	465.3	436.4	425.7
22.5°	520.8	490.3	436.4	404.4	390.0
25°	504.0	466.0	409.0	371.0	356.5
27.5°	485.0	441.7	377.8	338.3	322.3
30°	463.7	417.4	348.9	307.9	287.4
32.5°	442.5	392.3	318.5	273.7	253.2
35°	420.4	364.1	288.9	238.0	220.5
37.5°	396.8	337.5	258.5	205.3	184.7
40°	374.0	310.9	228.1	171.8	152.8
42.5°	349.7	284.3	197.7	139.1	117.8
45°	324.6	255.4	168.8	107.2	85.1
47.5°	298.8	229.6	139.9	79.1	63.9
50°	272.9	202.2	112.5	58.5	53.2
52.5°	246.3	175.6	85.1	48.7	46.4
55°	219.7	150.5	61.6	41.8	39.5
57.5°	192.3	123.2	46.4	35.7	33.4
60°	162.7	98.8	36.5	29.6	27.4
62.5°	135.3	77.5	29.6	24.3	22.8
65°	108.7	55.5	23.6	19.8	18.2
67.5°	81.3	37.3	18.2	15.2	15.2
70°	55.5	24.3	13.7	12.2	12.2
72.5°	33.4	14.4	9.9	9.9	9.9
75°	13.7	9.1	7.6	7.6	7.6
77.5°	4.6	5.3	5.3	6.1	6.1
80°	3.0	3.0	3.8	4.6	4.6
82.5°	1.5	2.3	2.3	3.0	3.0
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



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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	14.25	15.58	14.61	15.89	16.21	4.90	6.23	5.26	6.54	6.86
	3H	14.95	16.13	15.33	16.46	16.83	5.68	6.86	6.06	7.19	7.55
	4H	14.97	16.07	15.37	16.42	16.80	5.93	7.03	6.33	7.38	7.76
	6H	14.90	15.91	15.32	16.28	16.67	6.11	7.12	6.53	7.49	7.88
	8H	14.86	15.81	15.29	16.20	16.61	6.16	7.11	6.59	7.50	7.90
	12H	14.82	15.73	15.25	16.11	16.54	6.16	7.07	6.59	7.45	7.88
4H	2H	14.08	15.18	14.48	15.53	15.91	5.39	6.48	5.79	6.83	7.22
	3H	14.83	15.72	15.24	16.12	16.52	6.30	7.19	6.71	7.59	8.00
	4H	14.84	15.64	15.28	16.06	16.50	6.61	7.41	7.05	7.82	8.27
	6H	14.78	15.47	15.25	15.91	16.38	6.87	7.56	7.34	8.00	8.47
	8H	14.73	15.37	15.20	15.82	16.29	6.94	7.58	7.41	8.02	8.49
	12H	14.69	15.25	15.17	15.73	16.21	6.96	7.52	7.45	8.01	8.48
8H	4H	14.73	15.36	15.20	15.81	16.28	6.72	7.36	7.19	7.81	8.28
	6H	14.65	15.17	15.15	15.67	16.15	7.05	7.56	7.55	8.06	8.54
	8H	14.60	15.06	15.12	15.58	16.07	7.15	7.61	7.67	8.13	8.62
	12H	14.56	14.97	15.07	15.46	16.03	7.21	7.62	7.72	8.11	8.69
12H	4H	14.68	15.25	15.17	15.73	16.20	6.69	7.26	7.18	7.74	8.21
	6H	14.59	15.06	15.12	15.57	16.07	7.02	7.48	7.54	8.00	8.49
	8H	14.56	14.97	15.07	15.46	16.04	7.15	7.56	7.67	8.06	8.63