

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: P1062175

Luminaire Tested: S125RDR-H850D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062175
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-H850D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

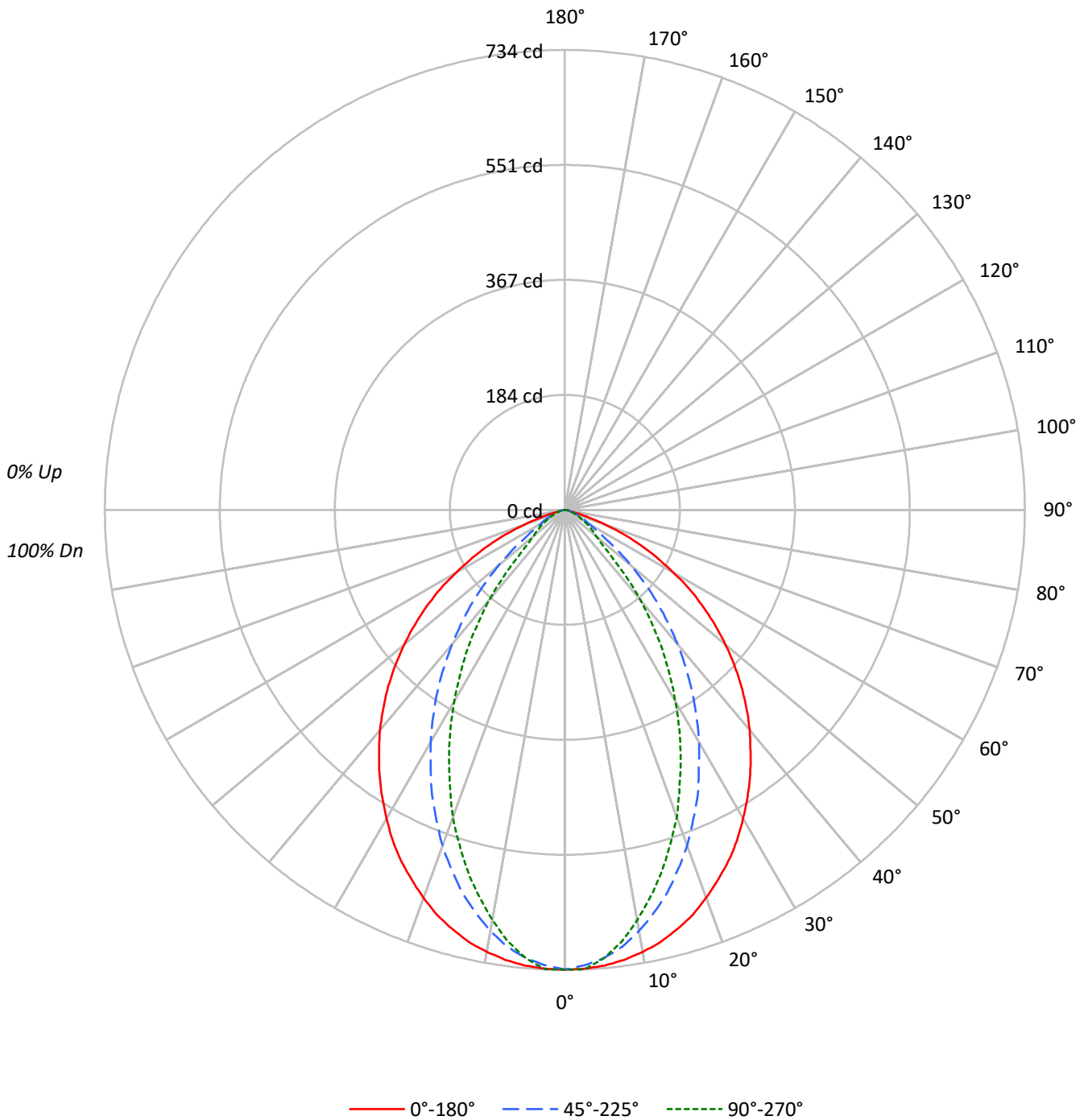
Lumens per Lamp: N/A
Luminaire Lumens: 1061.3 lumens
Efficiency: N/A
Efficacy: 45.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52				52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43				43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5052	5052	5052
5°	5046	4962	4962
10°	5007	4772	4648
15°	4938	4506	4260
20°	4830	4182	3826
25°	4696	3811	3322
30°	4522	3403	2803
35°	4334	2978	2273
40°	4124	2514	1684
45°	3877	2016	1017
50°	3585	1478	699
55°	3235	906	582
60°	2747	617	463
65°	2172	471	365
70°	1371	338	300
75°	447	247	247
80°	147	186	222
85°	71	150	150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3877 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	6.4
10°-20°	179.2	16.9
20°-30°	235.8	22.2
30°-40°	231.7	21.8
40°-50°	175.3	16.5
50°-60°	106.3	10.0
60°-70°	50.2	4.7
70°-80°	13.1	1.2
80°-90°	2.0	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°	482.9	45.5
0°-40°	714.5	67.3
0°-60°	996.1	93.9
0°-90°	1061.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1061.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	730	728	718	719	718	69
15°	693	674	632	608	598	195
25°	618	572	502	455	437	284
35°	516	447	354	292	270	322
45°	398	313	207	132	104	307
55°	270	185	76	51	48	240
65°	133	68	29	24	22	131
75°	17	11	9	9	9	26
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°	733.8	733.8	733.8	733.8	733.8
2.5°	732.9	732.9	727.3	733.8	733.8
5°	730.1	728.2	718.0	718.9	718.0
7.5°	724.5	720.8	703.1	698.4	694.7
10°	716.1	708.7	682.6	671.4	664.8
12.5°	706.8	693.7	658.3	642.5	632.2
15°	692.8	674.2	632.2	608.0	597.7
17.5°	677.9	650.8	601.4	572.5	559.5
20°	659.2	627.5	570.7	535.2	522.2
22.5°	638.7	601.4	535.2	496.1	478.3
25°	618.2	571.6	501.7	455.0	437.3
27.5°	594.9	541.8	463.4	414.9	395.4
30°	568.8	511.9	428.0	377.6	352.5
32.5°	542.7	481.1	390.7	335.7	310.5
35°	515.6	446.6	354.3	291.9	270.4
37.5°	486.7	414.0	317.0	251.8	226.6
40°	458.8	381.4	279.7	210.7	187.4
42.5°	428.9	348.7	242.4	170.6	144.5
45°	398.2	313.3	207.0	131.5	104.4
47.5°	366.5	281.6	171.6	97.0	78.3
50°	334.7	248.0	138.0	71.8	65.3
52.5°	302.1	215.4	104.4	59.7	56.9
55°	269.5	184.6	75.5	51.3	48.5
57.5°	235.9	151.1	56.9	43.8	41.0
60°	199.5	121.2	44.8	36.4	33.6
62.5°	166.0	95.1	36.4	29.8	28.0
65°	133.3	68.1	28.9	24.2	22.4
67.5°	99.8	45.7	22.4	18.6	18.6
70°	68.1	29.8	16.8	14.9	14.9
72.5°	41.0	17.7	12.1	12.1	12.1
75°	16.8	11.2	9.3	9.3	9.3
77.5°	5.6	6.5	6.5	7.5	7.5
80°	3.7	3.7	4.7	5.6	5.6
82.5°	1.9	2.8	2.8	3.7	3.7
85°	0.9	0.9	1.9	1.9	1.9
87.5°	0.0	0.0	0.0	0.9	0.9
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	14.96	16.29	15.32	16.60	16.92	5.61	6.94	5.97	7.25	7.57
	3H	15.66	16.84	16.04	17.17	17.54	6.39	7.57	6.77	7.90	8.26
	4H	15.68	16.78	16.08	17.13	17.51	6.64	7.73	7.04	8.08	8.47
	6H	15.61	16.62	16.03	16.99	17.38	6.82	7.82	7.23	8.19	8.59
	8H	15.57	16.52	16.00	16.91	17.32	6.86	7.81	7.29	8.20	8.61
	12H	15.53	16.44	15.96	16.82	17.25	6.87	7.78	7.30	8.16	8.59
4H	2H	14.79	15.89	15.19	16.24	16.62	6.10	7.19	6.50	7.54	7.93
	3H	15.54	16.43	15.95	16.83	17.23	7.00	7.89	7.41	8.30	8.70
	4H	15.55	16.35	15.99	16.77	17.21	7.31	8.11	7.75	8.53	8.97
	6H	15.49	16.18	15.96	16.62	17.09	7.58	8.26	8.04	8.71	9.17
	8H	15.44	16.08	15.91	16.53	17.00	7.64	8.28	8.11	8.73	9.20
	12H	15.40	15.96	15.88	16.44	16.92	7.67	8.23	8.15	8.71	9.19
8H	4H	15.44	16.07	15.91	16.52	16.99	7.43	8.06	7.90	8.51	8.98
	6H	15.36	15.88	15.86	16.38	16.86	7.75	8.27	8.25	8.76	9.25
	8H	15.31	15.77	15.83	16.29	16.78	7.85	8.32	8.37	8.83	9.33
	12H	15.27	15.68	15.78	16.17	16.74	7.92	8.33	8.43	8.82	9.39
12H	4H	15.39	15.96	15.88	16.44	16.91	7.40	7.96	7.88	8.44	8.92
	6H	15.30	15.77	15.83	16.28	16.78	7.72	8.19	8.24	8.70	9.19
	8H	15.27	15.68	15.78	16.17	16.75	7.86	8.27	8.37	8.76	9.34