

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: P1062032

Luminaire Tested: S125RDR-H375D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062032
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-H375D850-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

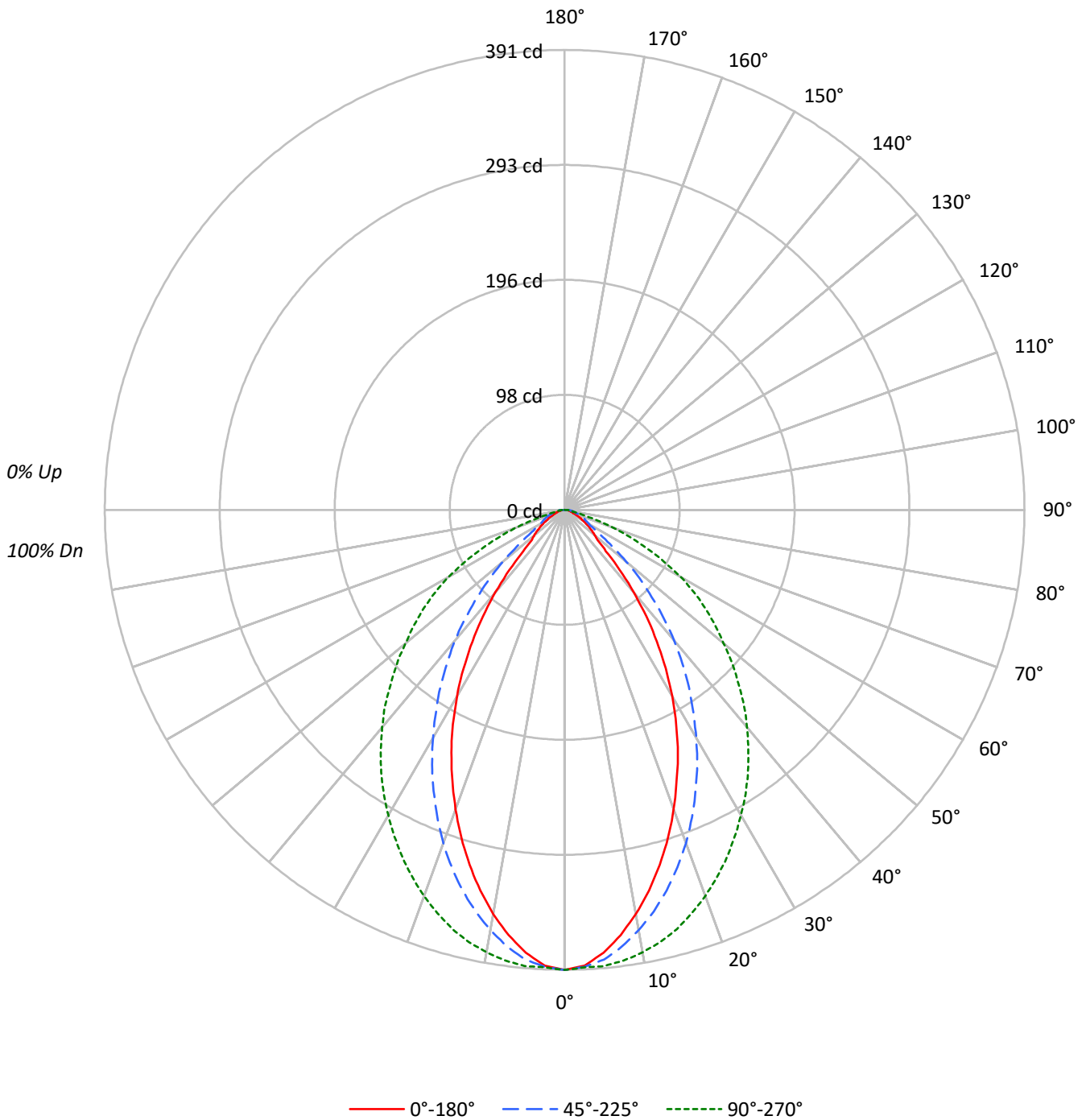
Lumens per Lamp: N/A
Luminaire Lumens: 564.7 lumens
Efficiency: N/A
Efficacy: 48.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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

TEST NUMBER: P1062032

CATALOG NUMBER: S125RDR-H375D850-X4F0-XX-UDD-SVL-S

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°	2693	2693	2693
5°	2613	2652	2691
10°	2439	2536	2670
15°	2226	2388	2630
20°	1986	2210	2560
25°	1731	2002	2478
30°	1453	1778	2383
35°	1146	1548	2285
40°	822	1301	2169
45°	483	1021	2033
50°	358	736	1888
55°	301	445	1755
60°	242	326	1566
65°	189	310	1254
70°	159	290	850
75°	149	258	370
80°	147	258	238
85°	182	332	253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2033 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.0	6.4
10°-20°	94.7	16.8
20°-30°	123.7	21.9
30°-40°	120.4	21.3
40°-50°	90.0	15.9
50°-60°	55.8	9.9
60°-70°	29.3	5.2
70°-80°	10.7	1.9
80°-90°	4.0	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°	254.4	45.1
0°-40°	374.9	66.4
0°-60°	520.7	92.2
0°-90°	564.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	564.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	391	391	391	391	391	
5°	378	383	384	386	389	35
15°	312	322	335	355	369	87
25°	228	239	264	299	326	104
35°	136	151	184	233	272	85
45°	50	65	105	164	209	42
55°	25	26	37	96	146	23
65°	12	12	19	41	77	12
75°	6	6	10	11	14	6
85°	2	4	4	4	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	391.1	391.1	391.1	391.1	391.1
2.5°	387.9	391.1	388.8	388.8	389.3
5°	378.1	383.2	383.7	386.0	389.3
7.5°	364.7	370.7	374.4	381.4	386.5
10°	348.9	355.9	362.8	374.4	381.9
12.5°	331.3	339.6	349.8	365.6	376.3
15°	312.3	321.5	335.0	355.4	368.9
17.5°	292.3	302.0	318.8	343.3	359.6
20°	271.0	281.6	301.6	329.4	349.4
22.5°	249.2	261.2	283.0	314.6	338.2
25°	227.8	239.4	263.5	299.3	326.2
27.5°	205.5	217.6	244.1	283.5	313.2
30°	182.8	195.8	223.6	267.2	299.7
32.5°	160.1	173.5	203.7	250.5	286.3
35°	136.4	151.3	184.2	233.4	271.9
37.5°	114.1	129.9	164.2	215.7	256.6
40°	91.4	107.6	144.8	198.6	241.3
42.5°	69.1	85.8	124.8	180.9	226.0
45°	49.6	65.0	104.9	163.8	208.8
47.5°	38.0	46.9	86.3	146.2	193.5
50°	33.4	36.2	68.7	129.0	176.3
52.5°	29.2	31.1	51.0	112.3	161.5
55°	25.1	26.4	37.1	96.5	146.2
57.5°	21.3	22.7	28.3	82.1	130.4
60°	17.6	19.0	23.7	67.7	113.7
62.5°	14.8	15.3	21.3	54.3	95.1
65°	11.6	12.5	19.0	40.8	77.0
67.5°	9.7	10.2	16.7	29.2	59.4
70°	7.9	8.4	14.4	20.4	42.2
72.5°	7.0	7.0	12.1	14.8	26.9
75°	5.6	6.5	9.7	10.7	13.9
77.5°	4.6	6.5	8.4	7.9	7.4
80°	3.7	6.0	6.5	6.5	6.0
82.5°	3.2	5.1	5.6	5.1	4.6
85°	2.3	4.2	4.2	4.2	3.2
87.5°	1.9	3.7	3.2	3.2	2.3
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	3.22	4.57	3.58	4.88	5.19	12.93	14.28	13.30	14.59	14.91
	3H	4.06	5.26	4.44	5.59	5.95	13.84	15.04	14.22	15.37	15.74
	4H	4.42	5.54	4.83	5.89	6.27	13.94	15.06	14.34	15.41	15.79
	6H	4.79	5.82	5.21	6.19	6.58	13.93	14.95	14.34	15.32	15.72
	8H	4.97	5.94	5.40	6.33	6.74	13.91	14.89	14.34	15.28	15.68
	12H	5.13	6.06	5.56	6.44	6.87	13.90	14.83	14.33	15.21	15.64
4H	2H	4.05	5.16	4.45	5.51	5.90	12.78	13.90	13.18	14.25	14.63
	3H	5.11	6.03	5.52	6.43	6.83	13.77	14.69	14.18	15.09	15.49
	4H	5.57	6.39	6.00	6.81	7.25	13.90	14.72	14.33	15.14	15.58
	6H	6.12	6.83	6.59	7.28	7.74	13.93	14.64	14.39	15.08	15.55
	8H	6.38	7.04	6.85	7.49	7.96	13.93	14.59	14.40	15.04	15.51
	12H	6.62	7.20	7.10	7.68	8.16	13.94	14.52	14.43	15.01	15.48
8H	4H	6.13	6.79	6.59	7.23	7.70	13.83	14.48	14.29	14.93	15.40
	6H	6.90	7.44	7.40	7.94	8.42	13.89	14.42	14.39	14.92	15.40
	8H	7.31	7.80	7.83	8.31	8.80	13.91	14.40	14.43	14.91	15.40
	12H	7.73	8.16	8.24	8.65	9.22	13.97	14.39	14.48	14.89	15.46
12H	4H	6.19	6.77	6.67	7.25	7.73	13.79	14.37	14.28	14.86	15.33
	6H	7.04	7.53	7.57	8.04	8.54	13.85	14.34	14.37	14.85	15.34
	8H	7.57	8.00	8.08	8.49	9.06	13.92	14.34	14.43	14.84	15.41