

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: P1062239

Luminaire Tested: S125RDR-H850D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062239
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-H850D950-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, 90 CRI LEDS
Ballast/Driver: -

Summary

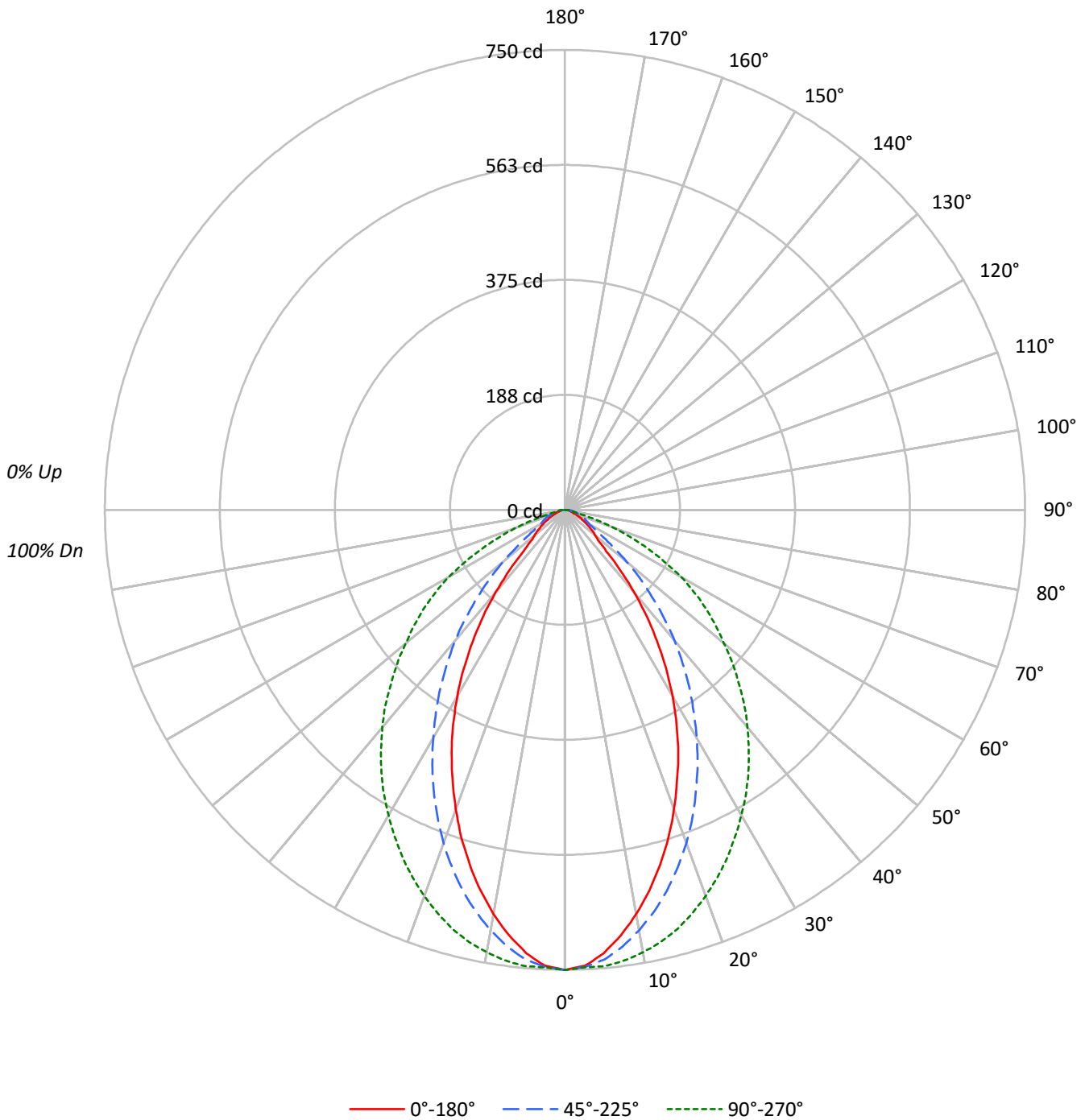
Lumens per Lamp: N/A
Luminaire Lumens: 1083.5 lumens
Efficiency: N/A
Efficacy: 46.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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									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	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°	5167	5167	5167
5°	5014	5088	5162
10°	4680	4867	5122
15°	4270	4581	5045
20°	3809	4239	4911
25°	3321	3841	4754
30°	2788	3412	4571
35°	2200	2970	4384
40°	1577	2496	4161
45°	927	1959	3901
50°	687	1411	3624
55°	577	855	3366
60°	465	625	3003
65°	363	595	2408
70°	304	556	1631
75°	285	497	710
80°	282	496	460
85°	355	632	490

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3901 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	6.4
10°-20°	181.6	16.8
20°-30°	237.4	21.9
30°-40°	231.1	21.3
40°-50°	172.7	15.9
50°-60°	107.1	9.9
60°-70°	56.3	5.2
70°-80°	20.5	1.9
80°-90°	7.7	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°	488.2	45.1
0°-40°	719.2	66.4
0°-60°	999.0	92.2
0°-90°	1083.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1083.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	750	750	750	750	750	
5°	726	735	736	741	747	67
15°	599	617	643	682	708	167
25°	437	459	506	574	626	200
35°	262	290	353	448	522	163
45°	95	125	201	314	401	80
55°	48	51	71	185	280	43
65°	22	24	36	78	148	23
75°	11	12	19	20	27	12
85°	4	8	8	8	6	5
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	750.4	750.4	750.4	750.4	750.4
2.5°	744.2	750.4	746.0	746.0	746.8
5°	725.5	735.3	736.2	740.6	746.8
7.5°	699.7	711.2	718.4	731.7	741.5
10°	669.4	682.8	696.1	718.4	732.6
12.5°	635.6	651.6	671.2	701.4	721.9
15°	599.1	616.9	642.7	681.9	707.7
17.5°	560.8	579.5	611.5	658.7	689.9
20°	519.9	540.3	578.6	632.0	670.3
22.5°	478.0	501.2	543.0	603.5	648.9
25°	437.1	459.3	505.6	574.2	625.8
27.5°	394.3	417.5	468.2	543.9	600.9
30°	350.7	375.6	429.1	512.7	575.0
32.5°	307.1	332.9	390.8	480.7	549.2
35°	261.7	290.2	353.4	447.8	521.6
37.5°	219.0	249.2	315.1	413.9	492.3
40°	175.4	206.5	277.7	381.0	462.9
42.5°	132.6	164.7	239.5	347.2	433.5
45°	95.2	124.6	201.2	314.2	400.6
47.5°	73.0	89.9	165.6	280.4	371.2
50°	64.1	69.4	131.7	247.5	338.3
52.5°	56.1	59.6	97.9	215.4	309.8
55°	48.1	50.7	71.2	185.2	280.4
57.5°	40.9	43.6	54.3	157.6	250.1
60°	33.8	36.5	45.4	130.0	218.1
62.5°	28.5	29.4	40.9	104.1	182.5
65°	22.3	24.0	36.5	78.3	147.8
67.5°	18.7	19.6	32.0	56.1	113.9
70°	15.1	16.0	27.6	39.2	81.0
72.5°	13.4	13.4	23.1	28.5	51.6
75°	10.7	12.5	18.7	20.5	26.7
77.5°	8.9	12.5	16.0	15.1	14.2
80°	7.1	11.6	12.5	12.5	11.6
82.5°	6.2	9.8	10.7	9.8	8.9
85°	4.5	8.0	8.0	8.0	6.2
87.5°	3.6	7.1	6.2	6.2	4.5
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	5.49	6.84	5.85	7.15	7.47	15.20	16.55	15.56	16.86	17.18
	3H	6.33	7.53	6.71	7.86	8.22	16.11	17.31	16.49	17.64	18.00
	4H	6.69	7.81	7.09	8.16	8.54	16.21	17.32	16.61	17.68	18.06
	6H	7.06	8.09	7.48	8.46	8.85	16.19	17.22	16.61	17.59	17.98
	8H	7.24	8.22	7.67	8.61	9.01	16.18	17.15	16.61	17.54	17.95
	12H	7.41	8.34	7.84	8.72	9.15	16.17	17.10	16.60	17.48	17.91
4H	2H	6.32	7.44	6.72	7.79	8.17	15.05	16.17	15.45	16.52	16.90
	3H	7.38	8.29	7.79	8.69	9.10	16.04	16.95	16.45	17.36	17.76
	4H	7.84	8.65	8.27	9.07	9.51	16.17	16.98	16.60	17.40	17.85
	6H	8.39	9.10	8.86	9.55	10.01	16.20	16.90	16.66	17.35	17.82
	8H	8.65	9.31	9.12	9.76	10.23	16.20	16.86	16.67	17.31	17.78
	12H	8.90	9.48	9.38	9.96	10.44	16.21	16.79	16.69	17.27	17.75
8H	4H	8.39	9.05	8.86	9.50	9.97	16.09	16.75	16.56	17.20	17.67
	6H	9.17	9.71	9.67	10.21	10.69	16.15	16.69	16.65	17.19	17.67
	8H	9.59	10.07	10.11	10.59	11.08	16.18	16.66	16.70	17.18	17.67
	12H	10.00	10.43	10.52	10.93	11.50	16.23	16.66	16.75	17.16	17.73
12H	4H	8.45	9.04	8.94	9.52	9.99	16.06	16.64	16.54	17.12	17.60
	6H	9.31	9.80	9.84	10.31	10.81	16.12	16.60	16.64	17.12	17.61
	8H	9.84	10.27	10.36	10.76	11.33	16.18	16.61	16.70	17.11	17.68