

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: P1062209

Luminaire Tested: S125RDR-H850D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062209
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H850D930-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

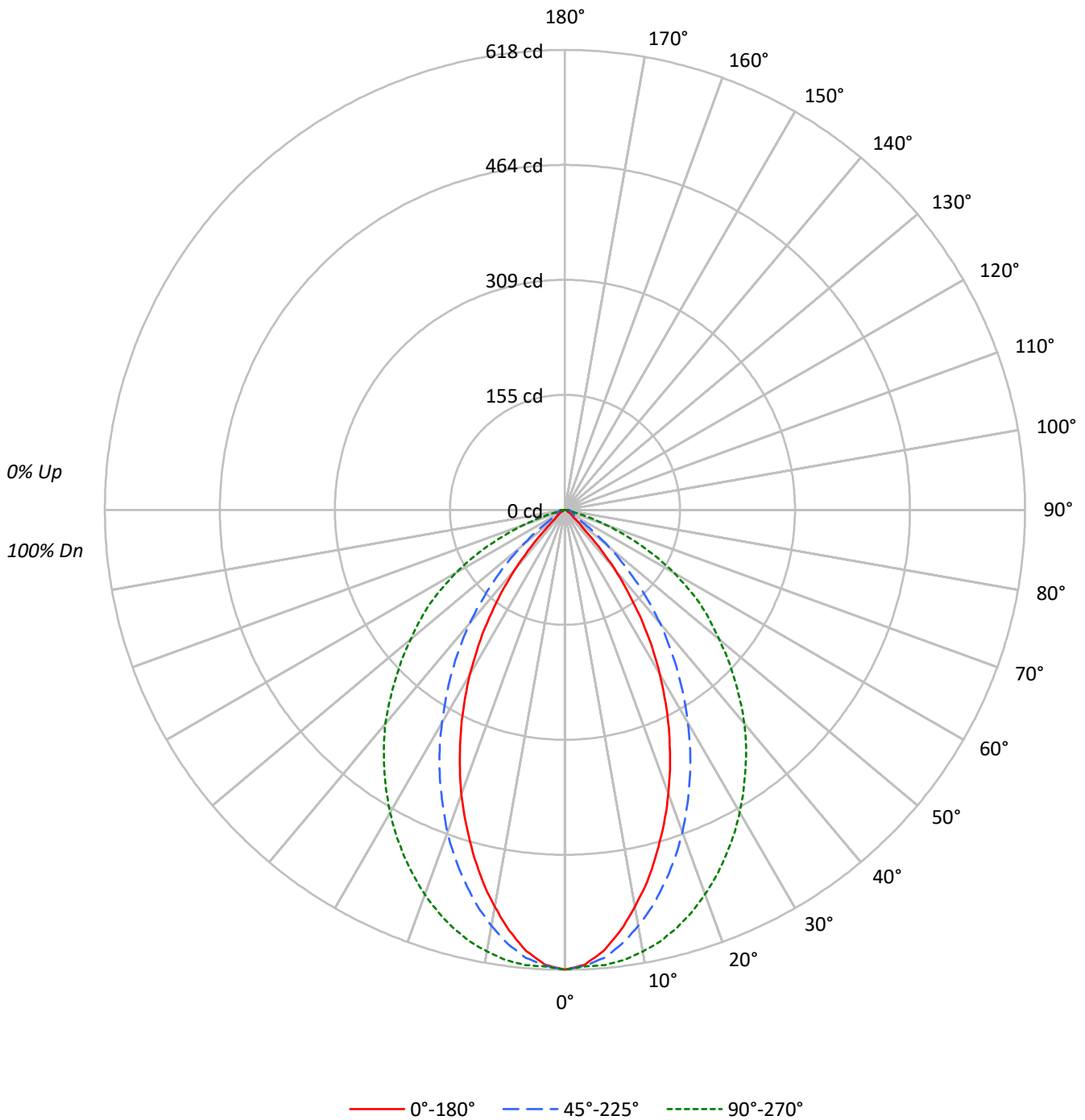
Lumens per Lamp: N/A
Luminaire Lumens: 794.6 lumens
Efficiency: N/A
Efficacy: 33.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4254	4254	4254
5°	4112	4175	4244
10°	3787	3968	4213
15°	3401	3694	4144
20°	2977	3379	4031
25°	2515	3018	3890
30°	2027	2625	3733
35°	1490	2213	3555
40°	930	1785	3371
45°	349	1304	3133
50°	163	815	2893
55°	119	339	2676
60°	84	178	2316
65°	49	210	1834
70°	46	246	1164
75°	61	242	364
80°	91	301	270
85°	182	482	363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3133 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	7.1
10°-20°	146.7	18.5
20°-30°	186.8	23.5
30°-40°	173.9	21.9
40°-50°	119.1	15.0
50°-60°	65.6	8.3
60°-70°	31.1	3.9
70°-80°	9.8	1.2
80°-90°	5.0	0.6
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°	390.2	49.1
0°-40°	564.1	71.0
0°-60°	748.8	94.2
0°-90°	794.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	794.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	595	603	604	609	614	55
15°	477	492	518	557	581	133
25°	331	352	397	461	512	151
35°	177	202	263	350	423	110
45°	36	60	134	237	322	34
55°	10	11	28	132	223	9
65°	3	4	13	49	113	3
75°	2	4	9	10	14	2
85°	2	5	6	5	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	617.8	617.8	617.8	617.8	617.8
2.5°	611.7	617.8	613.3	613.3	614.0
5°	595.0	602.6	604.1	608.7	614.0
7.5°	570.6	580.5	588.1	601.1	610.2
10°	541.7	553.9	567.6	588.9	602.6
12.5°	511.3	524.2	544.8	574.5	593.5
15°	477.1	492.3	518.2	557.0	581.3
17.5°	442.1	458.8	490.8	536.4	566.8
20°	406.3	423.8	461.1	512.1	550.1
22.5°	369.0	388.0	429.1	487.0	531.8
25°	331.0	351.5	397.2	461.1	512.1
27.5°	292.9	314.2	364.5	434.5	491.5
30°	254.9	277.0	330.2	407.1	469.5
32.5°	216.1	240.4	296.7	379.7	446.6
35°	177.3	202.4	263.3	350.0	423.0
37.5°	139.2	165.1	230.5	321.8	399.5
40°	103.5	129.3	198.6	293.7	375.1
42.5°	67.0	94.3	165.1	264.8	348.5
45°	35.8	60.1	133.9	237.4	321.8
47.5°	19.0	32.0	104.2	210.0	296.7
50°	15.2	17.5	76.1	182.6	270.1
52.5°	12.2	13.7	48.7	154.5	246.5
55°	9.9	11.4	28.2	132.4	222.9
57.5°	7.6	9.1	16.0	110.3	195.5
60°	6.1	6.8	12.9	88.3	168.2
62.5°	3.8	5.3	12.9	68.5	140.8
65°	3.0	3.8	12.9	48.7	112.6
67.5°	3.0	3.0	12.9	32.0	84.5
70°	2.3	2.3	12.2	20.5	57.8
72.5°	2.3	2.3	10.7	13.7	33.5
75°	2.3	3.8	9.1	9.9	13.7
77.5°	2.3	6.1	8.4	8.4	7.6
80°	2.3	6.1	7.6	6.8	6.8
82.5°	2.3	6.1	6.1	6.1	5.3
85°	2.3	5.3	6.1	5.3	4.6
87.5°	2.3	5.3	5.3	5.3	3.0
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	0.00	0.00	0.00	0.00	0.00	14.07	15.36	14.44	15.67	15.99
	3H	0.00	0.00	0.00	0.00	0.00	14.86	16.00	15.24	16.33	16.69
	4H	0.00	0.00	0.00	0.00	0.00	14.89	15.95	15.29	16.30	16.68
	6H	0.00	0.00	0.00	0.00	0.00	14.84	15.82	15.26	16.19	16.58
	8H	0.00	0.00	0.00	0.00	0.16	14.82	15.74	15.25	16.13	16.54
	12H	0.00	0.08	0.00	0.46	0.89	14.80	15.68	15.23	16.06	16.49
4H	2H	0.00	0.00	0.00	0.00	0.00	13.86	14.91	14.26	15.27	15.65
	3H	0.00	0.00	0.00	0.00	0.39	14.69	15.55	15.10	15.95	16.36
	4H	0.00	0.09	0.00	0.51	0.95	14.72	15.49	15.16	15.91	16.35
	6H	0.83	1.49	1.29	1.94	2.40	14.71	15.37	15.17	15.82	16.29
	8H	1.57	2.19	2.04	2.64	3.11	14.69	15.31	15.16	15.76	16.23
	12H	2.32	2.86	2.80	3.35	3.82	14.69	15.24	15.18	15.72	16.20
8H	4H	1.36	1.98	1.83	2.43	2.90	14.61	15.23	15.08	15.67	16.15
	6H	3.12	3.62	3.62	4.12	4.60	14.61	15.11	15.11	15.61	16.09
	8H	4.07	4.53	4.60	5.04	5.54	14.61	15.07	15.14	15.58	16.08
	12H	5.00	5.41	5.52	5.90	6.47	14.66	15.06	15.17	15.56	16.13
12H	4H	1.67	2.21	2.15	2.70	3.17	14.56	15.11	15.05	15.59	16.07
	6H	3.57	4.03	4.10	4.54	5.04	14.56	15.02	15.09	15.53	16.03
	8H	4.71	5.11	5.23	5.61	6.18	14.60	15.00	15.12	15.50	16.07