

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1062235

Luminaire Tested: S125RDRP-H850D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1062235
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H850D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

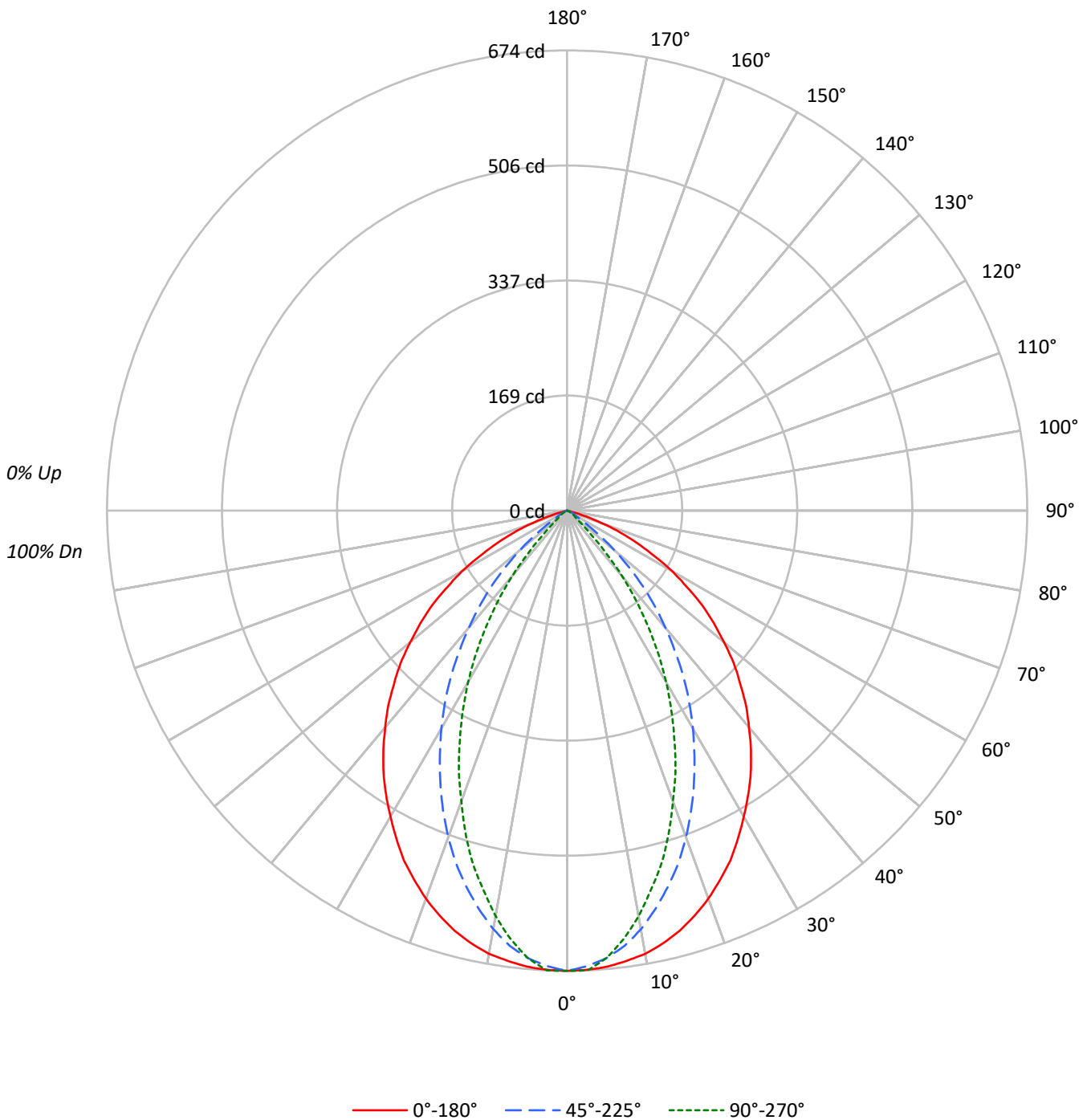
Lumens per Lamp: N/A
Luminaire Lumens: 871.1 lumens
Efficiency: N/A
Efficacy: 37.1 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4642	4642	4642
5°	4636	4549	4549
10°	4608	4353	4217
15°	4540	4064	3811
20°	4432	3728	3318
25°	4298	3338	2825
30°	4116	2928	2306
35°	3940	2497	1727
40°	3726	2015	1119
45°	3491	1525	485
50°	3211	972	181
55°	2894	427	128
60°	2450	183	85
65°	1856	116	44
70°	1127	54	18
75°	237	24	24
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3491 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	7.1
10°-20°	162.0	18.6
20°-30°	208.0	23.9
30°-40°	195.8	22.5
40°-50°	136.9	15.7
50°-60°	73.1	8.4
60°-70°	29.2	3.3
70°-80°	3.8	0.4
80°-90°	0.0	0.0
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°	432.2	49.6
0°-40°	628.0	72.1
0°-60°	838.1	96.2
0°-90°	871.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	871.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	671	669	658	660	658	64
15°	637	616	570	544	535	179
25°	566	516	439	391	372	260
35°	469	394	297	230	206	293
45°	358	269	157	76	50	276
55°	241	148	36	12	11	214
65°	114	45	7	4	3	113
75°	9	3	1	1	1	17
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	674.2	674.2	674.2	674.2	674.2
2.5°	673.3	674.2	668.0	673.3	674.2
5°	670.7	668.9	658.2	660.0	658.2
7.5°	665.3	660.9	643.1	636.9	633.3
10°	659.1	649.3	622.6	609.3	603.1
12.5°	649.3	635.1	597.7	577.3	568.4
15°	636.9	616.4	570.2	543.5	534.6
17.5°	621.8	595.1	541.7	508.8	495.4
20°	604.9	569.3	508.8	469.7	452.8
22.5°	585.3	544.4	475.0	431.4	414.5
25°	565.7	515.9	439.4	391.4	371.8
27.5°	541.7	486.6	403.8	352.2	330.9
30°	517.7	457.2	368.3	312.2	290.0
32.5°	493.7	426.1	332.7	270.4	248.2
35°	468.8	394.0	297.1	229.5	205.5
37.5°	442.1	362.0	258.8	190.4	165.4
40°	414.5	330.9	224.2	152.1	124.5
42.5°	387.8	299.8	189.5	114.7	84.5
45°	358.5	268.6	156.6	75.6	49.8
47.5°	330.9	238.4	122.8	43.6	25.8
50°	299.8	207.3	90.7	23.1	16.9
52.5°	270.4	177.0	60.5	15.1	13.3
55°	241.1	147.7	35.6	12.5	10.7
57.5°	207.3	119.2	19.6	9.8	8.0
60°	177.9	93.4	13.3	7.1	6.2
62.5°	144.1	68.5	9.8	5.3	4.4
65°	113.9	45.4	7.1	3.6	2.7
67.5°	84.5	26.7	4.4	1.8	1.8
70°	56.0	14.2	2.7	0.9	0.9
72.5°	29.4	6.2	1.8	0.9	0.9
75°	8.9	2.7	0.9	0.9	0.9
77.5°	0.0	0.9	0.0	0.0	0.9
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	14.28	15.54	14.64	15.85	16.17	0.00	0.00	0.00	0.00	0.00
	3H	14.86	15.97	15.24	16.31	16.67	0.00	0.00	0.00	0.00	0.00
	4H	14.83	15.86	15.23	16.21	16.59	0.00	0.00	0.00	0.00	0.00
	6H	14.74	15.69	15.16	16.06	16.45	0.00	0.00	0.00	0.00	0.00
	8H	14.69	15.59	15.13	15.98	16.38	0.00	0.00	0.00	0.00	0.00
	12H	14.65	15.50	15.08	15.88	16.31	0.00	0.00	0.00	0.00	0.00
4H	2H	14.05	15.08	14.46	15.43	15.82	0.00	0.00	0.00	0.00	0.00
	3H	14.64	15.48	15.06	15.88	16.29	0.00	0.00	0.00	0.00	0.00
	4H	14.59	15.33	15.03	15.76	16.20	0.00	0.00	0.00	0.00	0.00
	6H	14.51	15.14	14.97	15.59	16.06	0.00	0.00	0.00	0.00	0.00
	8H	14.45	15.04	14.92	15.49	15.96	0.00	0.00	0.00	0.00	0.00
	12H	14.39	14.92	14.88	15.40	15.88	0.00	0.00	0.00	0.00	0.00
8H	4H	14.45	15.04	14.92	15.49	15.96	0.00	0.00	0.00	0.00	0.00
	6H	14.34	14.82	14.84	15.32	15.80	0.00	0.00	0.00	0.00	0.00
	8H	14.27	14.70	14.80	15.22	15.71	0.00	0.00	0.00	0.00	0.00
	12H	14.22	14.60	14.74	15.10	15.67	0.00	0.00	0.00	0.00	0.00
12H	4H	14.39	14.92	14.88	15.40	15.88	0.00	0.00	0.00	0.00	0.00
	6H	14.27	14.70	14.80	15.22	15.71	0.00	0.00	0.00	0.00	0.00
	8H	14.22	14.60	14.74	15.10	15.67	0.00	0.00	0.00	0.00	0.00