

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: P1061914

Luminaire Tested: S125RDR-H1090D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061914
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-H1090D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

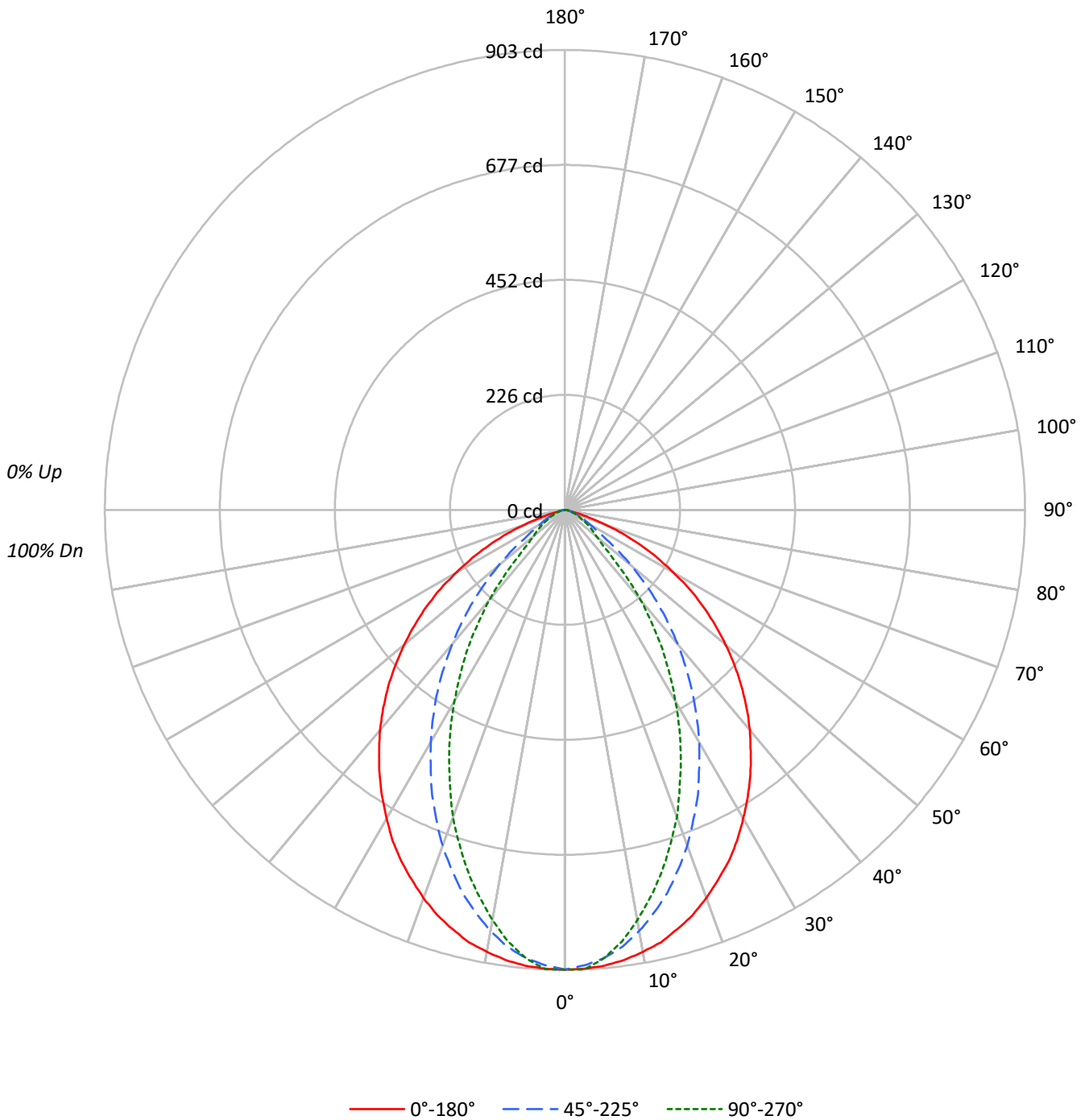
Lumens per Lamp: N/A
Luminaire Lumens: 1305.7 lumens
Efficiency: N/A
Efficacy: 41.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	97	98	96	95	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52				
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43				
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6216	6216	6216
5°	6209	6105	6105
10°	6160	5871	5719
15°	6076	5544	5242
20°	5943	5144	4707
25°	5778	4689	4087
30°	5564	4187	3447
35°	5332	3664	2796
40°	5073	3094	2073
45°	4770	2480	1251
50°	4411	1819	860
55°	3979	1115	717
60°	3381	759	569
65°	2673	580	448
70°	1685	415	370
75°	548	306	306
80°	182	226	274
85°	87	182	182

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4770 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	6.4
10°-20°	220.5	16.9
20°-30°	290.1	22.2
30°-40°	285.0	21.8
40°-50°	215.6	16.5
50°-60°	130.7	10.0
60°-70°	61.7	4.7
70°-80°	16.1	1.2
80°-90°	2.4	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°	594.1	45.5
0°-40°	879.1	67.3
0°-60°	1225.5	93.9
0°-90°	1305.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1305.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	903	903	903	903	903	
5°	898	896	883	884	883	85
15°	852	829	778	748	735	240
25°	761	703	617	560	538	350
35°	634	550	436	359	333	396
45°	490	386	255	162	128	377
55°	332	227	93	63	60	295
65°	164	84	36	30	28	162
75°	21	14	12	12	12	32
85°	1	1	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	902.8	902.8	902.8	902.8	902.8
2.5°	901.7	901.7	894.8	902.8	902.8
5°	898.3	896.0	883.3	884.5	883.3
7.5°	891.4	886.8	865.0	859.3	854.7
10°	881.1	871.9	839.8	826.0	818.0
12.5°	869.6	853.5	809.9	790.4	777.8
15°	852.4	829.4	777.8	748.0	735.4
17.5°	834.0	800.7	739.9	704.4	688.3
20°	811.1	772.1	702.1	658.5	642.4
22.5°	785.8	739.9	658.5	610.3	588.5
25°	760.6	703.2	617.2	559.8	538.0
27.5°	731.9	666.5	570.2	510.5	486.4
30°	699.8	629.8	526.6	464.6	433.6
32.5°	667.7	592.0	480.7	413.0	382.0
35°	634.4	549.5	435.9	359.1	332.7
37.5°	598.8	509.4	390.0	309.7	278.8
40°	564.4	469.2	344.2	259.3	230.6
42.5°	527.7	429.1	298.3	209.9	177.8
45°	489.9	385.5	254.7	161.8	128.5
47.5°	450.9	346.5	211.1	119.3	96.4
50°	411.8	305.2	169.8	88.3	80.3
52.5°	371.7	265.0	128.5	73.4	70.0
55°	331.5	227.1	92.9	63.1	59.7
57.5°	290.2	185.8	70.0	53.9	50.5
60°	245.5	149.1	55.1	44.7	41.3
62.5°	204.2	117.0	44.7	36.7	34.4
65°	164.1	83.7	35.6	29.8	27.5
67.5°	122.8	56.2	27.5	22.9	22.9
70°	83.7	36.7	20.6	18.4	18.4
72.5°	50.5	21.8	14.9	14.9	14.9
75°	20.6	13.8	11.5	11.5	11.5
77.5°	6.9	8.0	8.0	9.2	9.2
80°	4.6	4.6	5.7	6.9	6.9
82.5°	2.3	3.4	3.4	4.6	4.6
85°	1.1	1.1	2.3	2.3	2.3
87.5°	0.0	0.0	0.0	1.1	1.1
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	15.68	17.01	16.04	17.32	17.64	6.33	7.66	6.70	7.98	8.29
	3H	16.38	17.56	16.76	17.89	18.25	7.11	8.29	7.49	8.62	8.98
	4H	16.40	17.49	16.80	17.85	18.23	7.36	8.46	7.77	8.81	9.19
	6H	16.33	17.33	16.74	17.71	18.10	7.54	8.55	7.96	8.92	9.31
	8H	16.29	17.24	16.72	17.63	18.04	7.59	8.54	8.02	8.93	9.34
	12H	16.25	17.16	16.68	17.54	17.97	7.60	8.50	8.03	8.89	9.32
4H	2H	15.51	16.60	15.91	16.95	17.34	6.82	7.92	7.22	8.27	8.65
	3H	16.25	17.15	16.67	17.55	17.95	7.73	8.62	8.14	9.02	9.43
	4H	16.27	17.07	16.71	17.49	17.93	8.04	8.84	8.48	9.26	9.70
	6H	16.21	16.89	16.67	17.34	17.81	8.30	8.99	8.77	9.43	9.90
	8H	16.16	16.80	16.63	17.24	17.72	8.37	9.01	8.84	9.45	9.93
	12H	16.11	16.68	16.60	17.16	17.63	8.39	8.96	8.88	9.44	9.91
8H	4H	16.15	16.79	16.62	17.24	17.71	8.15	8.79	8.62	9.24	9.71
	6H	16.08	16.60	16.58	17.10	17.58	8.47	8.99	8.98	9.49	9.97
	8H	16.02	16.49	16.55	17.01	17.50	8.58	9.05	9.10	9.56	10.05
	12H	15.98	16.40	16.50	16.89	17.46	8.64	9.05	9.16	9.55	10.12
12H	4H	16.11	16.67	16.60	17.16	17.63	8.13	8.69	8.61	9.17	9.65
	6H	16.02	16.49	16.54	17.00	17.50	8.44	8.91	8.97	9.43	9.92
	8H	15.99	16.40	16.50	16.89	17.46	8.58	9.00	9.10	9.49	10.06