

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: P1062157

Luminaire Tested: S125RDR-H610D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062157
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-H610D950-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

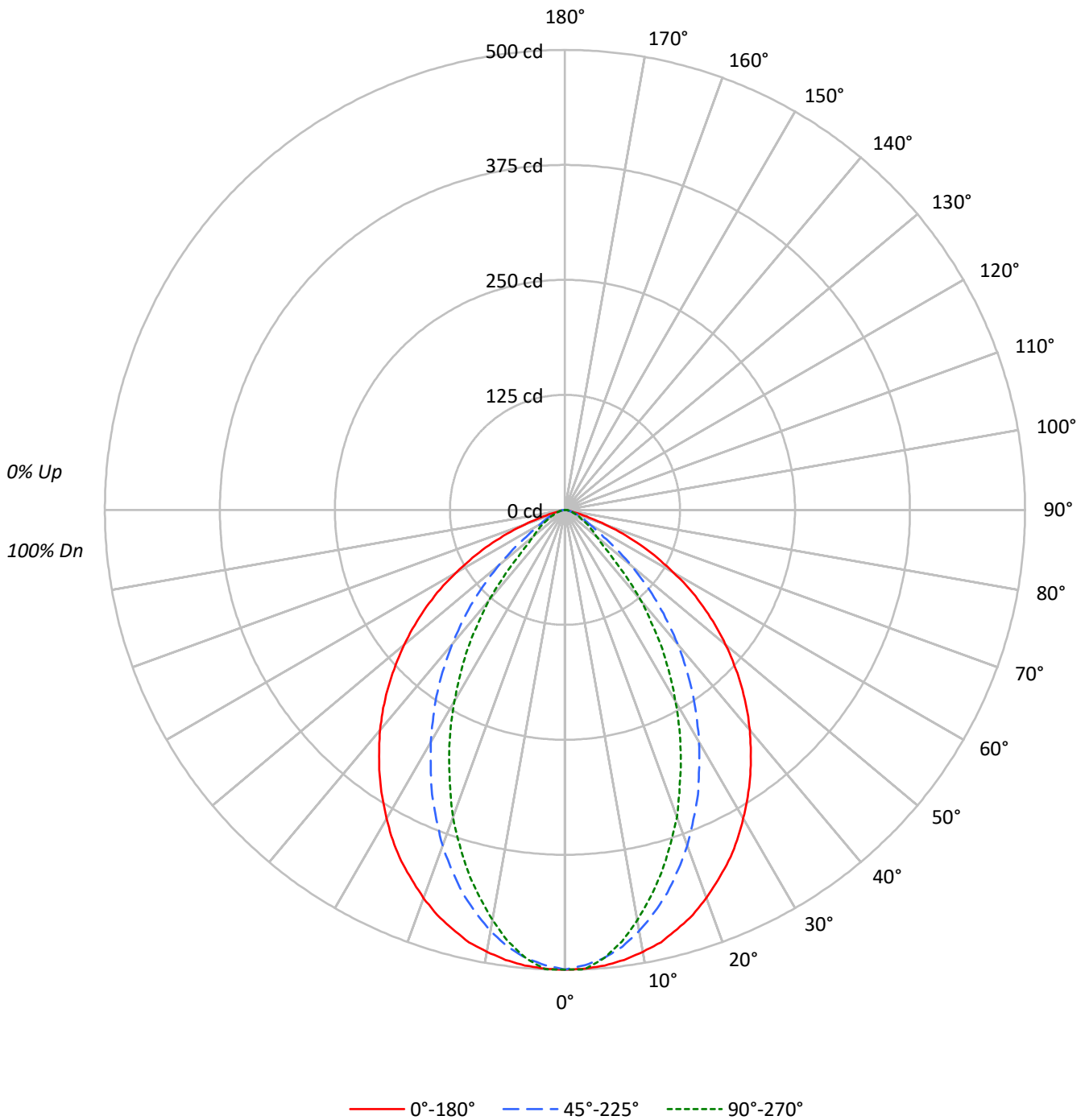
Lumens per Lamp: N/A
Luminaire Lumens: 722.9 lumens
Efficiency: N/A
Efficacy: 41.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	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°	3442	3442	3442
5°	3437	3380	3380
10°	3410	3250	3166
15°	3364	3069	2902
20°	3291	2848	2606
25°	3199	2596	2263
30°	3081	2318	1909
35°	2953	2029	1548
40°	2809	1713	1148
45°	2641	1373	692
50°	2442	1007	477
55°	2204	617	396
60°	1871	420	315
65°	1479	321	248
70°	934	229	205
75°	303	170	170
80°	99	127	151
85°	47	103	103

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2641 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.2	6.4
10°-20°	122.1	16.9
20°-30°	160.6	22.2
30°-40°	157.8	21.8
40°-50°	119.4	16.5
50°-60°	72.4	10.0
60°-70°	34.2	4.7
70°-80°	8.9	1.2
80°-90°	1.3	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°	328.9	45.5
0°-40°	486.7	67.3
0°-60°	678.5	93.9
0°-90°	722.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	722.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	497	496	489	490	489	47
15°	472	459	431	414	407	133
25°	421	389	342	310	298	194
35°	351	304	241	199	184	219
45°	271	213	141	90	71	209
55°	184	126	51	35	33	163
65°	91	46	20	16	15	90
75°	11	8	6	6	6	18
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	499.9	499.9	499.9	499.9	499.9
2.5°	499.2	499.2	495.4	499.9	499.9
5°	497.3	496.1	489.1	489.7	489.1
7.5°	493.5	491.0	478.9	475.7	473.2
10°	487.8	482.7	464.9	457.3	452.9
12.5°	481.5	472.6	448.4	437.6	430.6
15°	471.9	459.2	430.6	414.1	407.1
17.5°	461.8	443.4	409.7	390.0	381.1
20°	449.1	427.5	388.7	364.6	355.7
22.5°	435.1	409.7	364.6	337.9	325.8
25°	421.1	389.4	341.7	310.0	297.9
27.5°	405.2	369.0	315.7	282.7	269.3
30°	387.5	348.7	291.5	257.2	240.1
32.5°	369.7	327.8	266.1	228.7	211.5
35°	351.3	304.2	241.4	198.8	184.2
37.5°	331.6	282.0	216.0	171.5	154.3
40°	312.5	259.8	190.6	143.5	127.7
42.5°	292.2	237.6	165.1	116.2	98.5
45°	271.2	213.4	141.0	89.6	71.1
47.5°	249.6	191.8	116.9	66.1	53.4
50°	228.0	169.0	94.0	48.9	44.5
52.5°	205.8	146.7	71.1	40.7	38.7
55°	183.6	125.8	51.4	34.9	33.0
57.5°	160.7	102.9	38.7	29.9	27.9
60°	135.9	82.6	30.5	24.8	22.9
62.5°	113.1	64.8	24.8	20.3	19.1
65°	90.8	46.4	19.7	16.5	15.2
67.5°	68.0	31.1	15.2	12.7	12.7
70°	46.4	20.3	11.4	10.2	10.2
72.5°	27.9	12.1	8.3	8.3	8.3
75°	11.4	7.6	6.4	6.4	6.4
77.5°	3.8	4.4	4.4	5.1	5.1
80°	2.5	2.5	3.2	3.8	3.8
82.5°	1.3	1.9	1.9	2.5	2.5
85°	0.6	0.6	1.3	1.3	1.3
87.5°	0.0	0.0	0.0	0.6	0.6
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	13.62	14.96	13.99	15.27	15.58	4.29	5.62	4.65	5.93	6.25
	3H	14.33	15.51	14.71	15.84	16.20	5.07	6.24	5.45	6.57	6.94
	4H	14.35	15.44	14.75	15.79	16.18	5.32	6.42	5.72	6.77	7.15
	6H	14.28	15.28	14.69	15.65	16.05	5.50	6.50	5.91	6.87	7.27
	8H	14.24	15.19	14.67	15.58	15.98	5.54	6.49	5.97	6.88	7.29
	12H	14.19	15.10	14.63	15.49	15.92	5.55	6.46	5.98	6.84	7.27
4H	2H	13.45	14.55	13.86	14.90	15.28	4.77	5.87	5.18	6.22	6.60
	3H	14.20	15.09	14.61	15.50	15.90	5.68	6.57	6.09	6.98	7.38
	4H	14.22	15.01	14.65	15.43	15.88	6.00	6.79	6.43	7.21	7.66
	6H	14.16	14.84	14.62	15.29	15.75	6.26	6.94	6.72	7.39	7.86
	8H	14.11	14.74	14.57	15.19	15.66	6.32	6.96	6.79	7.41	7.88
	12H	14.06	14.62	14.55	15.11	15.58	6.35	6.91	6.83	7.39	7.87
8H	4H	14.10	14.74	14.57	15.19	15.66	6.11	6.75	6.58	7.20	7.67
	6H	14.03	14.54	14.53	15.04	15.52	6.43	6.95	6.93	7.44	7.93
	8H	13.97	14.44	14.49	14.95	15.45	6.53	7.00	7.05	7.51	8.00
	12H	13.93	14.34	14.45	14.84	15.41	6.59	7.00	7.11	7.50	8.07
12H	4H	14.06	14.62	14.54	15.10	15.58	6.08	6.64	6.57	7.13	7.60
	6H	13.97	14.43	14.49	14.95	15.44	6.40	6.87	6.92	7.38	7.87
	8H	13.93	14.34	14.45	14.84	15.41	6.53	6.95	7.05	7.44	8.01