

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: P1062155

Luminaire Tested: S125RDR-H610D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062155
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-H610D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

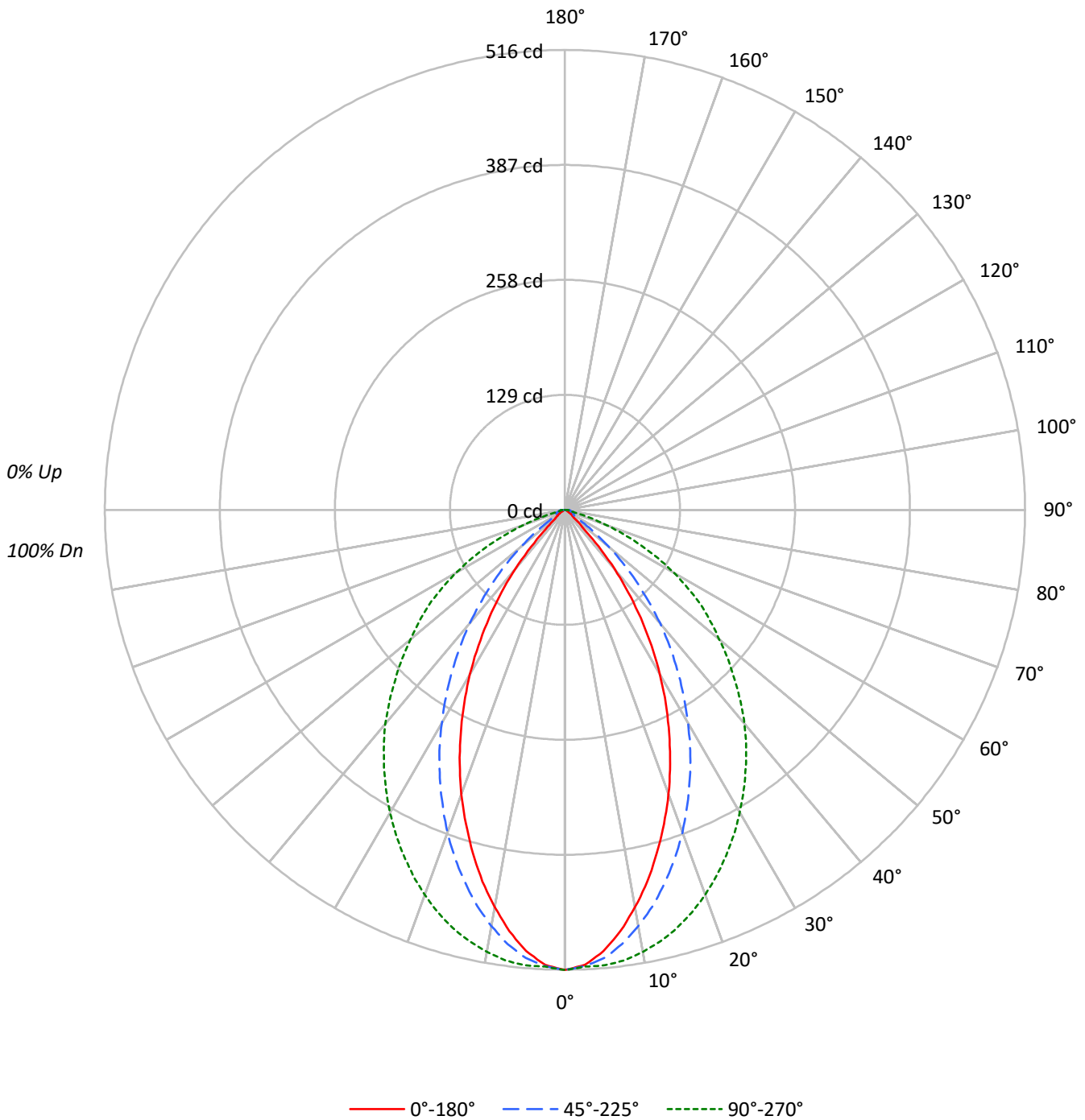
Lumens per Lamp: N/A
Luminaire Lumens: 663.9 lumens
Efficiency: N/A
Efficacy: 38.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3554	3554	3554
5°	3436	3489	3546
10°	3164	3315	3520
15°	2841	3086	3462
20°	2488	2822	3368
25°	2101	2521	3250
30°	1693	2194	3118
35°	1245	1849	2971
40°	777	1491	2817
45°	291	1090	2618
50°	136	681	2418
55°	100	282	2236
60°	70	149	1935
65°	41	176	1533
70°	38	205	972
75°	51	202	303
80°	75	254	226
85°	150	403	300

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2618 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.3	7.1
10°-20°	122.5	18.5
20°-30°	156.1	23.5
30°-40°	145.3	21.9
40°-50°	99.6	15.0
50°-60°	54.8	8.3
60°-70°	25.9	3.9
70°-80°	8.2	1.2
80°-90°	4.2	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°	326.0	49.1
0°-40°	471.3	71.0
0°-60°	625.6	94.2
0°-90°	663.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	663.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	497	504	505	509	513	46
15°	399	411	433	465	486	111
25°	276	294	332	385	428	126
35°	148	169	220	292	354	92
45°	30	50	112	198	269	28
55°	8	10	24	111	186	8
65°	2	3	11	41	94	3
75°	2	3	8	8	11	2
85°	2	4	5	4	4	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	516.2	516.2	516.2	516.2	516.2
2.5°	511.1	516.2	512.4	512.4	513.0
5°	497.1	503.5	504.8	508.6	513.0
7.5°	476.8	485.0	491.4	502.2	509.8
10°	452.6	462.8	474.2	492.0	503.5
12.5°	427.2	438.0	455.2	480.0	495.9
15°	398.6	411.3	432.9	465.3	485.7
17.5°	369.3	383.3	410.0	448.2	473.6
20°	339.5	354.1	385.2	427.8	459.6
22.5°	308.3	324.2	358.5	406.9	444.4
25°	276.5	293.7	331.8	385.2	427.8
27.5°	244.7	262.5	304.5	363.0	410.7
30°	213.0	231.4	275.9	340.1	392.2
32.5°	180.5	200.9	247.9	317.2	373.2
35°	148.1	169.1	220.0	292.4	353.5
37.5°	116.3	137.9	192.6	268.9	333.7
40°	86.5	108.1	165.9	245.4	313.4
42.5°	55.9	78.8	137.9	221.2	291.2
45°	29.9	50.2	111.9	198.3	268.9
47.5°	15.9	26.7	87.1	175.5	247.9
50°	12.7	14.6	63.6	152.6	225.7
52.5°	10.2	11.4	40.7	129.0	206.0
55°	8.3	9.5	23.5	110.6	186.3
57.5°	6.4	7.6	13.3	92.2	163.4
60°	5.1	5.7	10.8	73.7	140.5
62.5°	3.2	4.4	10.8	57.2	117.6
65°	2.5	3.2	10.8	40.7	94.1
67.5°	2.5	2.5	10.8	26.7	70.6
70°	1.9	1.9	10.2	17.2	48.3
72.5°	1.9	1.9	8.9	11.4	28.0
75°	1.9	3.2	7.6	8.3	11.4
77.5°	1.9	5.1	7.0	7.0	6.4
80°	1.9	5.1	6.4	5.7	5.7
82.5°	1.9	5.1	5.1	5.1	4.4
85°	1.9	4.4	5.1	4.4	3.8
87.5°	1.9	4.4	4.4	4.4	2.5
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	0.00	0.00	0.00	0.00	0.00	13.45	14.74	13.82	15.05	15.37
	3H	0.00	0.00	0.00	0.00	0.00	14.24	15.38	14.62	15.71	16.07
	4H	0.00	0.00	0.00	0.00	0.00	14.27	15.32	14.67	15.67	16.06
	6H	0.00	0.00	0.00	0.00	0.00	14.22	15.19	14.64	15.56	15.96
	8H	0.00	0.00	0.00	0.00	0.00	14.20	15.12	14.63	15.51	15.91
	12H	0.00	0.00	0.00	0.00	0.24	14.18	15.06	14.61	15.44	15.87
4H	2H	0.00	0.00	0.00	0.00	0.00	13.24	14.29	13.64	14.64	15.03
	3H	0.00	0.00	0.00	0.00	0.00	14.06	14.93	14.48	15.33	15.73
	4H	0.00	0.00	0.00	0.00	0.33	14.10	14.87	14.53	15.29	15.73
	6H	0.20	0.86	0.66	1.31	1.78	14.09	14.75	14.55	15.20	15.66
	8H	0.94	1.56	1.41	2.01	2.48	14.07	14.69	14.54	15.14	15.61
	12H	1.68	2.22	2.16	2.71	3.18	14.07	14.62	14.56	15.10	15.57
8H	4H	0.74	1.36	1.21	1.81	2.28	13.98	14.60	14.45	15.05	15.52
	6H	2.50	3.00	3.00	3.50	3.98	13.99	14.49	14.49	14.99	15.47
	8H	3.45	3.90	3.97	4.42	4.91	13.99	14.45	14.51	14.96	15.45
	12H	4.37	4.77	4.89	5.27	5.84	14.04	14.44	14.55	14.93	15.50
12H	4H	1.04	1.59	1.53	2.07	2.55	13.94	14.49	14.43	14.97	15.45
	6H	2.95	3.41	3.48	3.93	4.42	13.94	14.39	14.46	14.91	15.40
	8H	4.09	4.49	4.60	4.98	5.56	13.98	14.38	14.50	14.88	15.45