

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: P1062149

Luminaire Tested: S125RDR-H610D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062149
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D940-X4F0-XX-UDD-SVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

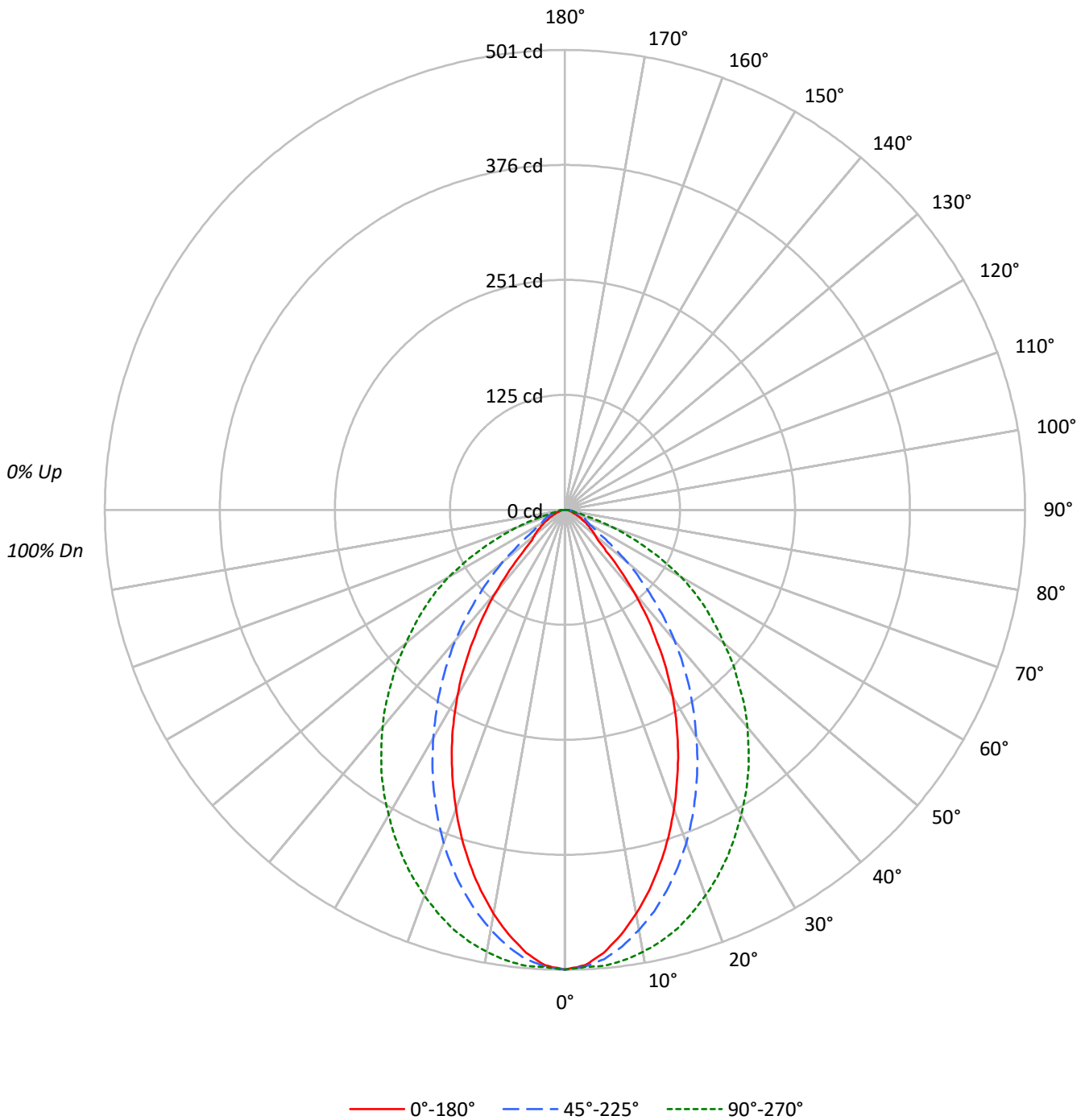
Lumens per Lamp: N/A
Luminaire Lumens: 723.2 lumens
Efficiency: N/A
Efficacy: 41.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63				63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3448	3448	3448
5°	3347	3396	3445
10°	3124	3248	3419
15°	2850	3057	3367
20°	2543	2830	3278
25°	2216	2564	3173
30°	1861	2277	3051
35°	1468	1983	2926
40°	1052	1666	2776
45°	619	1308	2603
50°	458	942	2419
55°	385	570	2246
60°	311	417	2005
65°	243	398	1606
70°	203	370	1089
75°	189	333	474
80°	190	329	305
85°	237	419	332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2603 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.1	6.4
10°-20°	121.2	16.8
20°-30°	158.4	21.9
30°-40°	154.2	21.3
40°-50°	115.3	15.9
50°-60°	71.5	9.9
60°-70°	37.5	5.2
70°-80°	13.7	1.9
80°-90°	5.2	0.7
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°	325.8	45.1
0°-40°	480.0	66.4
0°-60°	666.8	92.2
0°-90°	723.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	723.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	501	501	501	501	501	
5°	484	491	491	494	498	45
15°	400	412	429	455	472	112
25°	292	307	338	383	418	133
35°	175	194	236	299	348	109
45°	64	83	134	210	267	54
55°	32	34	48	124	187	29
65°	15	16	24	52	99	15
75°	7	8	12	14	18	8
85°	3	5	5	5	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	500.8	500.8	500.8	500.8	500.8
2.5°	496.7	500.8	497.9	497.9	498.5
5°	484.2	490.7	491.3	494.3	498.5
7.5°	467.0	474.7	479.4	488.4	494.9
10°	446.8	455.7	464.6	479.4	489.0
12.5°	424.2	434.9	448.0	468.2	481.8
15°	399.8	411.7	428.9	455.1	472.3
17.5°	374.3	386.8	408.2	439.6	460.4
20°	347.0	360.6	386.2	421.8	447.4
22.5°	319.0	334.5	362.4	402.8	433.1
25°	291.7	306.6	337.5	383.2	417.7
27.5°	263.2	278.6	312.5	363.0	401.0
30°	234.1	250.7	286.4	342.2	383.8
32.5°	205.0	222.2	260.8	320.8	366.6
35°	174.7	193.7	235.9	298.8	348.1
37.5°	146.2	166.4	210.3	276.3	328.5
40°	117.0	137.8	185.4	254.3	308.9
42.5°	88.5	109.9	159.8	231.7	289.3
45°	63.6	83.2	134.3	209.7	267.3
47.5°	48.7	60.0	110.5	187.1	247.7
50°	42.8	46.3	87.9	165.2	225.8
52.5°	37.4	39.8	65.4	143.8	206.7
55°	32.1	33.9	47.5	123.6	187.1
57.5°	27.3	29.1	36.2	105.2	166.9
60°	22.6	24.4	30.3	86.7	145.6
62.5°	19.0	19.6	27.3	69.5	121.8
65°	14.9	16.0	24.4	52.3	98.6
67.5°	12.5	13.1	21.4	37.4	76.0
70°	10.1	10.7	18.4	26.1	54.1
72.5°	8.9	8.9	15.4	19.0	34.5
75°	7.1	8.3	12.5	13.7	17.8
77.5°	5.9	8.3	10.7	10.1	9.5
80°	4.8	7.7	8.3	8.3	7.7
82.5°	4.2	6.5	7.1	6.5	5.9
85°	3.0	5.3	5.3	5.3	4.2
87.5°	2.4	4.8	4.2	4.2	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	4.08	5.43	4.45	5.75	6.06	13.79	15.14	14.16	15.46	15.77
	3H	4.93	6.13	5.31	6.46	6.82	14.70	15.90	15.08	16.23	16.60
	4H	5.28	6.40	5.69	6.75	7.13	14.80	15.92	15.20	16.27	16.65
	6H	5.66	6.68	6.07	7.05	7.45	14.79	15.81	15.20	16.18	16.58
	8H	5.84	6.81	6.27	7.20	7.61	14.78	15.75	15.21	16.14	16.54
	12H	6.01	6.94	6.44	7.32	7.75	14.76	15.69	15.19	16.07	16.51
4H	2H	4.92	6.03	5.32	6.39	6.77	13.64	14.76	14.05	15.11	15.49
	3H	5.98	6.89	6.39	7.29	7.70	14.63	15.55	15.04	15.95	16.35
	4H	6.43	7.25	6.86	7.67	8.11	14.76	15.58	15.20	16.00	16.44
	6H	6.98	7.69	7.45	8.14	8.60	14.79	15.50	15.26	15.95	16.41
	8H	7.25	7.91	7.72	8.35	8.82	14.79	15.45	15.26	15.90	16.37
	12H	7.49	8.07	7.98	8.56	9.03	14.80	15.38	15.29	15.87	16.34
8H	4H	6.98	7.64	7.45	8.09	8.56	14.69	15.35	15.15	15.79	16.26
	6H	7.76	8.30	8.26	8.79	9.27	14.75	15.28	15.25	15.78	16.26
	8H	8.18	8.66	8.70	9.17	9.67	14.77	15.26	15.29	15.77	16.26
	12H	8.59	9.02	9.11	9.51	10.08	14.83	15.25	15.34	15.75	16.32
12H	4H	7.04	7.63	7.53	8.11	8.58	14.65	15.23	15.14	15.72	16.19
	6H	7.90	8.39	8.42	8.90	9.39	14.71	15.20	15.23	15.71	16.20
	8H	8.43	8.86	8.94	9.35	9.92	14.78	15.20	15.29	15.70	16.27