

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: P1062140

Luminaire Tested: S125RDR-H610D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062140
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-H610D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

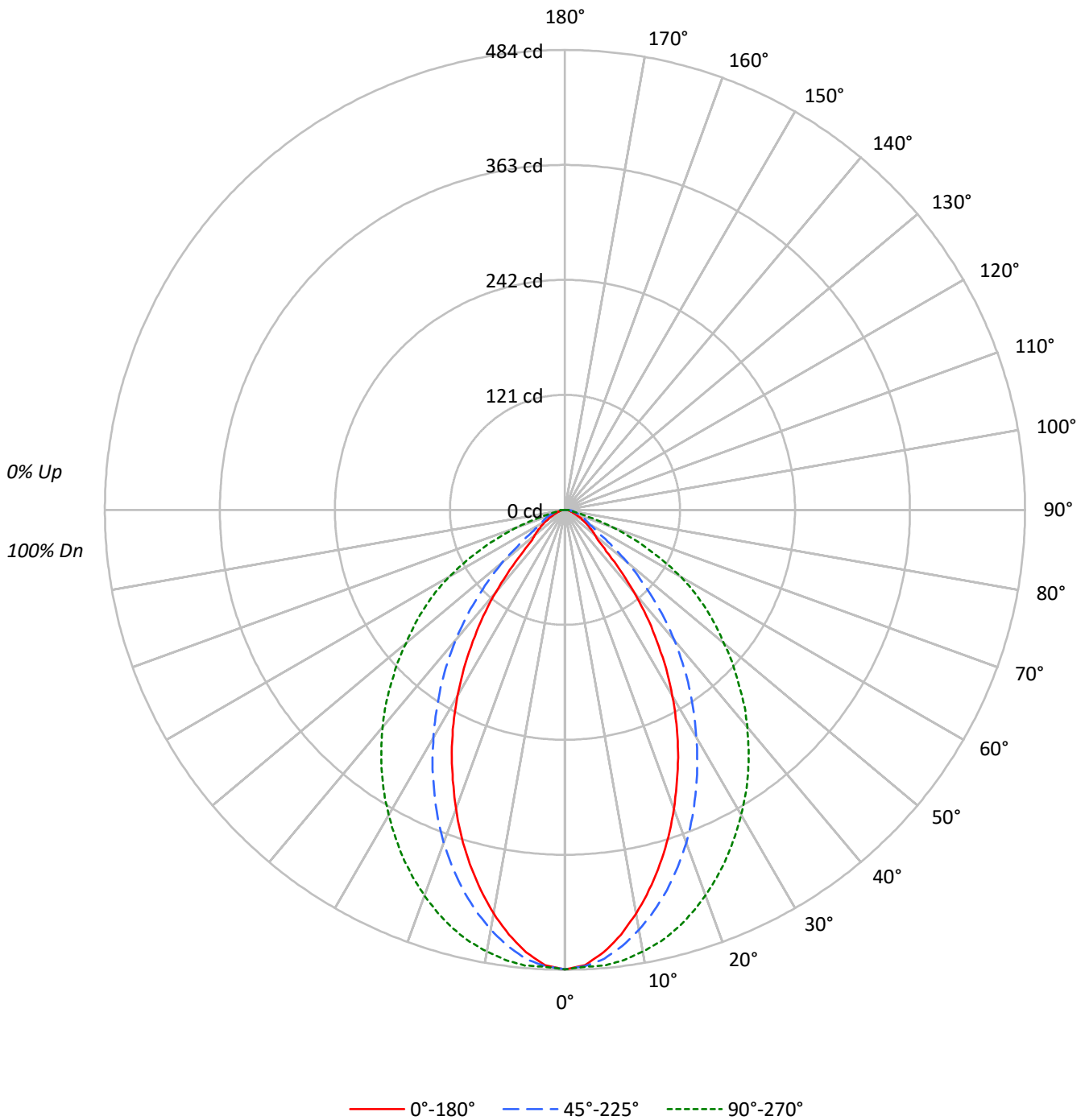
Lumens per Lamp: N/A
Luminaire Lumens: 698.2 lumens
Efficiency: N/A
Efficacy: 40.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	3330	3330	3330
5°	3231	3279	3327
10°	3016	3136	3301
15°	2752	2952	3250
20°	2455	2732	3165
25°	2140	2475	3064
30°	1797	2198	2946
35°	1418	1914	2826
40°	1016	1609	2681
45°	598	1262	2513
50°	442	909	2335
55°	372	551	2169
60°	300	403	1935
65°	233	383	1551
70°	197	358	1051
75°	184	319	458
80°	182	317	297
85°	229	411	316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2513 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	6.4
10°-20°	117.1	16.8
20°-30°	153.0	21.9
30°-40°	148.9	21.3
40°-50°	111.3	15.9
50°-60°	69.0	9.9
60°-70°	36.3	5.2
70°-80°	13.2	1.9
80°-90°	5.0	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°	314.6	45.1
0°-40°	463.5	66.4
0°-60°	643.8	92.2
0°-90°	698.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	698.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	484	484	484	484	484	
5°	468	474	474	477	481	43
15°	386	398	414	439	456	108
25°	282	296	326	370	403	129
35°	169	187	228	288	336	105
45°	61	80	130	202	258	52
55°	31	33	46	119	181	28
65°	14	16	24	50	95	15
75°	7	8	12	13	17	7
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°	483.6	483.6	483.6	483.6	483.6
2.5°	479.6	483.6	480.7	480.7	481.3
5°	467.5	473.8	474.4	477.3	481.3
7.5°	450.9	458.3	462.9	471.5	477.8
10°	431.4	440.0	448.6	462.9	472.1
12.5°	409.6	419.9	432.5	452.0	465.2
15°	386.1	397.5	414.2	439.4	456.0
17.5°	361.4	373.4	394.1	424.5	444.6
20°	335.0	348.2	372.9	407.3	432.0
22.5°	308.0	323.0	349.9	388.9	418.2
25°	281.7	296.0	325.8	370.0	403.3
27.5°	254.1	269.0	301.7	350.5	387.2
30°	226.0	242.1	276.5	330.4	370.6
32.5°	197.9	214.5	251.8	309.8	353.9
35°	168.7	187.0	227.7	288.5	336.2
37.5°	141.1	160.6	203.1	266.7	317.2
40°	113.0	133.1	179.0	245.5	298.3
42.5°	85.5	106.1	154.3	223.7	279.4
45°	61.4	80.3	129.6	202.5	258.1
47.5°	47.0	57.9	106.7	180.7	239.2
50°	41.3	44.7	84.9	159.5	218.0
52.5°	36.1	38.4	63.1	138.8	199.6
55°	31.0	32.7	45.9	119.3	180.7
57.5°	26.4	28.1	35.0	101.5	161.2
60°	21.8	23.5	29.3	83.8	140.5
62.5°	18.4	18.9	26.4	67.1	117.6
65°	14.3	15.5	23.5	50.5	95.2
67.5°	12.0	12.6	20.7	36.1	73.4
70°	9.8	10.3	17.8	25.2	52.2
72.5°	8.6	8.6	14.9	18.4	33.3
75°	6.9	8.0	12.0	13.2	17.2
77.5°	5.7	8.0	10.3	9.8	9.2
80°	4.6	7.5	8.0	8.0	7.5
82.5°	4.0	6.3	6.9	6.3	5.7
85°	2.9	5.2	5.2	5.2	4.0
87.5°	2.3	4.6	4.0	4.0	2.9
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	3.96	5.31	4.33	5.63	5.94	13.67	15.02	14.03	15.33	15.65
	3H	4.80	6.00	5.18	6.33	6.69	14.58	15.78	14.96	16.11	16.47
	4H	5.16	6.28	5.56	6.63	7.01	14.68	15.80	15.08	16.15	16.53
	6H	5.53	6.56	5.95	6.93	7.32	14.66	15.69	15.08	16.06	16.45
	8H	5.71	6.69	6.14	7.08	7.48	14.65	15.63	15.08	16.02	16.42
	12H	5.88	6.81	6.31	7.19	7.62	14.64	15.57	15.07	15.95	16.38
4H	2H	4.79	5.91	5.20	6.26	6.64	13.52	14.64	13.92	14.99	15.37
	3H	5.85	6.76	6.26	7.17	7.57	14.51	15.42	14.92	15.83	16.23
	4H	6.30	7.12	6.74	7.54	7.98	14.64	15.45	15.07	15.87	16.32
	6H	6.86	7.57	7.32	8.01	8.48	14.67	15.38	15.13	15.82	16.29
	8H	7.12	7.78	7.59	8.23	8.70	14.67	15.33	15.14	15.78	16.25
	12H	7.37	7.95	7.85	8.43	8.90	14.68	15.26	15.16	15.74	16.22
8H	4H	6.86	7.52	7.32	7.96	8.43	14.56	15.22	15.03	15.67	16.14
	6H	7.64	8.18	8.14	8.67	9.15	14.62	15.16	15.12	15.66	16.14
	8H	8.05	8.54	8.57	9.05	9.54	14.65	15.14	15.17	15.65	16.14
	12H	8.47	8.90	8.99	9.40	9.97	14.70	15.13	15.22	15.63	16.20
12H	4H	6.92	7.50	7.40	7.98	8.46	14.53	15.11	15.01	15.59	16.07
	6H	7.78	8.27	8.30	8.78	9.27	14.59	15.07	15.11	15.59	16.08
	8H	8.31	8.74	8.82	9.23	9.80	14.65	15.08	15.17	15.58	16.15