

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: P1062095

Luminaire Tested: S125RDR-H610D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062095
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-H610D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

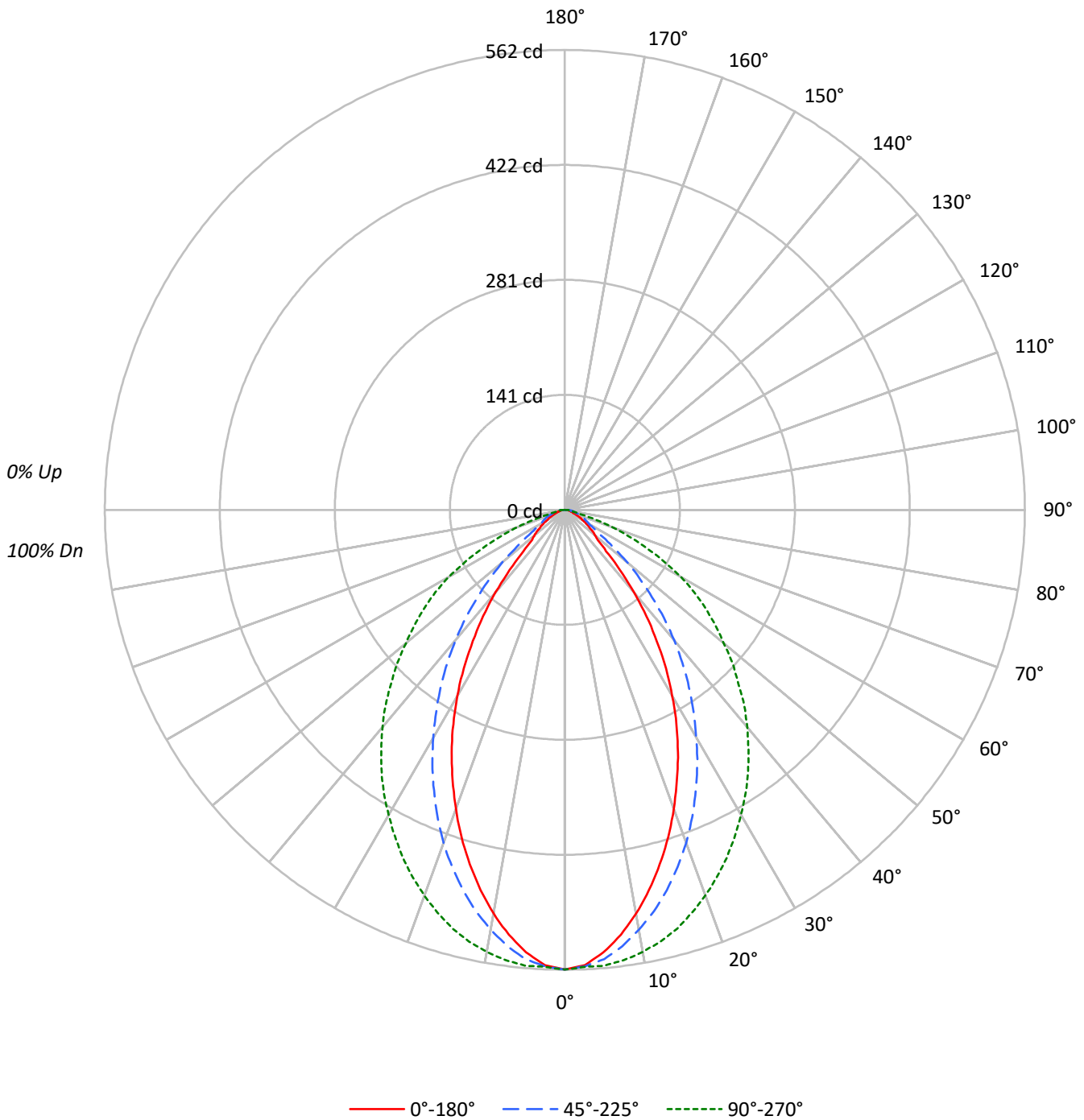
Lumens per Lamp: N/A
Luminaire Lumens: 811.0 lumens
Efficiency: N/A
Efficacy: 46.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	3867	3867	3867
5°	3753	3808	3864
10°	3503	3643	3833
15°	3196	3429	3776
20°	2851	3173	3676
25°	2485	2875	3558
30°	2087	2553	3422
35°	1647	2223	3281
40°	1180	1869	3114
45°	694	1466	2919
50°	514	1056	2712
55°	432	640	2520
60°	348	468	2247
65°	272	445	1802
70°	227	417	1220
75°	213	372	532
80°	210	369	345
85°	261	474	371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2919 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.7	6.4
10°-20°	136.0	16.8
20°-30°	177.7	21.9
30°-40°	173.0	21.3
40°-50°	129.3	15.9
50°-60°	80.2	9.9
60°-70°	42.1	5.2
70°-80°	15.3	1.9
80°-90°	5.8	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°	365.4	45.1
0°-40°	538.3	66.4
0°-60°	747.8	92.2
0°-90°	811.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	811.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	543	550	551	554	559	50
15°	448	462	481	510	530	125
25°	327	344	378	430	468	149
35°	196	217	264	335	390	122
45°	71	93	151	235	300	60
55°	36	38	53	139	210	32
65°	17	18	27	59	111	17
75°	8	9	14	15	20	9
85°	3	6	6	6	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	561.7	561.7	561.7	561.7	561.7
2.5°	557.0	561.7	558.3	558.3	559.0
5°	543.0	550.3	551.0	554.3	559.0
7.5°	523.7	532.3	537.7	547.7	555.0
10°	501.0	511.0	521.0	537.7	548.3
12.5°	475.7	487.7	502.4	525.0	540.3
15°	448.4	461.7	481.0	510.4	529.7
17.5°	419.7	433.7	457.7	493.0	516.3
20°	389.1	404.4	433.1	473.0	501.7
22.5°	357.8	375.1	406.4	451.7	485.7
25°	327.1	343.8	378.4	429.7	468.4
27.5°	295.2	312.5	350.5	407.1	449.7
30°	262.5	281.2	321.1	383.8	430.4
32.5°	229.9	249.2	292.5	359.8	411.1
35°	195.9	217.2	264.5	335.1	390.4
37.5°	163.9	186.6	235.9	309.8	368.4
40°	131.3	154.6	207.9	285.2	346.5
42.5°	99.3	123.3	179.2	259.8	324.5
45°	71.3	93.3	150.6	235.2	299.8
47.5°	54.6	67.3	123.9	209.9	277.8
50°	48.0	52.0	98.6	185.2	253.2
52.5°	42.0	44.6	73.3	161.2	231.9
55°	36.0	38.0	53.3	138.6	209.9
57.5°	30.6	32.6	40.6	117.9	187.2
60°	25.3	27.3	34.0	97.3	163.2
62.5°	21.3	22.0	30.6	78.0	136.6
65°	16.7	18.0	27.3	58.6	110.6
67.5°	14.0	14.7	24.0	42.0	85.3
70°	11.3	12.0	20.7	29.3	60.6
72.5°	10.0	10.0	17.3	21.3	38.6
75°	8.0	9.3	14.0	15.3	20.0
77.5°	6.7	9.3	12.0	11.3	10.7
80°	5.3	8.7	9.3	9.3	8.7
82.5°	4.7	7.3	8.0	7.3	6.7
85°	3.3	6.0	6.0	6.0	4.7
87.5°	2.7	5.3	4.7	4.7	3.3
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	4.48	5.83	4.84	6.14	6.45	14.19	15.54	14.55	15.85	16.17
	3H	5.32	6.52	5.70	6.85	7.21	15.10	16.30	15.48	16.63	16.99
	4H	5.68	6.80	6.08	7.15	7.53	15.20	16.32	15.60	16.67	17.05
	6H	6.05	7.08	6.47	7.45	7.84	15.19	16.21	15.60	16.58	16.98
	8H	6.24	7.21	6.66	7.60	8.00	15.17	16.15	15.60	16.54	16.94
	12H	6.40	7.33	6.83	7.71	8.14	15.16	16.09	15.59	16.47	16.90
4H	2H	5.31	6.42	5.71	6.77	7.16	14.04	15.16	14.44	15.51	15.89
	3H	6.37	7.28	6.78	7.69	8.09	15.03	15.94	15.44	16.35	16.75
	4H	6.82	7.64	7.26	8.06	8.50	15.16	15.98	15.59	16.39	16.84
	6H	7.38	8.09	7.84	8.53	9.00	15.19	15.90	15.65	16.34	16.81
	8H	7.64	8.30	8.11	8.75	9.22	15.19	15.85	15.66	16.30	16.77
	12H	7.88	8.47	8.37	8.95	9.42	15.20	15.78	15.69	16.27	16.74
8H	4H	7.38	8.04	7.85	8.48	8.95	15.08	15.74	15.55	16.19	16.66
	6H	8.16	8.70	8.66	9.19	9.67	15.14	15.68	15.64	16.18	16.66
	8H	8.57	9.06	9.10	9.57	10.07	15.17	15.66	15.69	16.17	16.66
	12H	8.99	9.42	9.50	9.91	10.48	15.23	15.65	15.74	16.15	16.72
12H	4H	7.44	8.02	7.92	8.50	8.98	15.05	15.63	15.53	16.11	16.59
	6H	8.30	8.79	8.82	9.30	9.79	15.11	15.59	15.63	16.11	16.60
	8H	8.83	9.26	9.34	9.75	10.32	15.17	15.60	15.69	16.10	16.67