

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: P1062094

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062094
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-H610D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

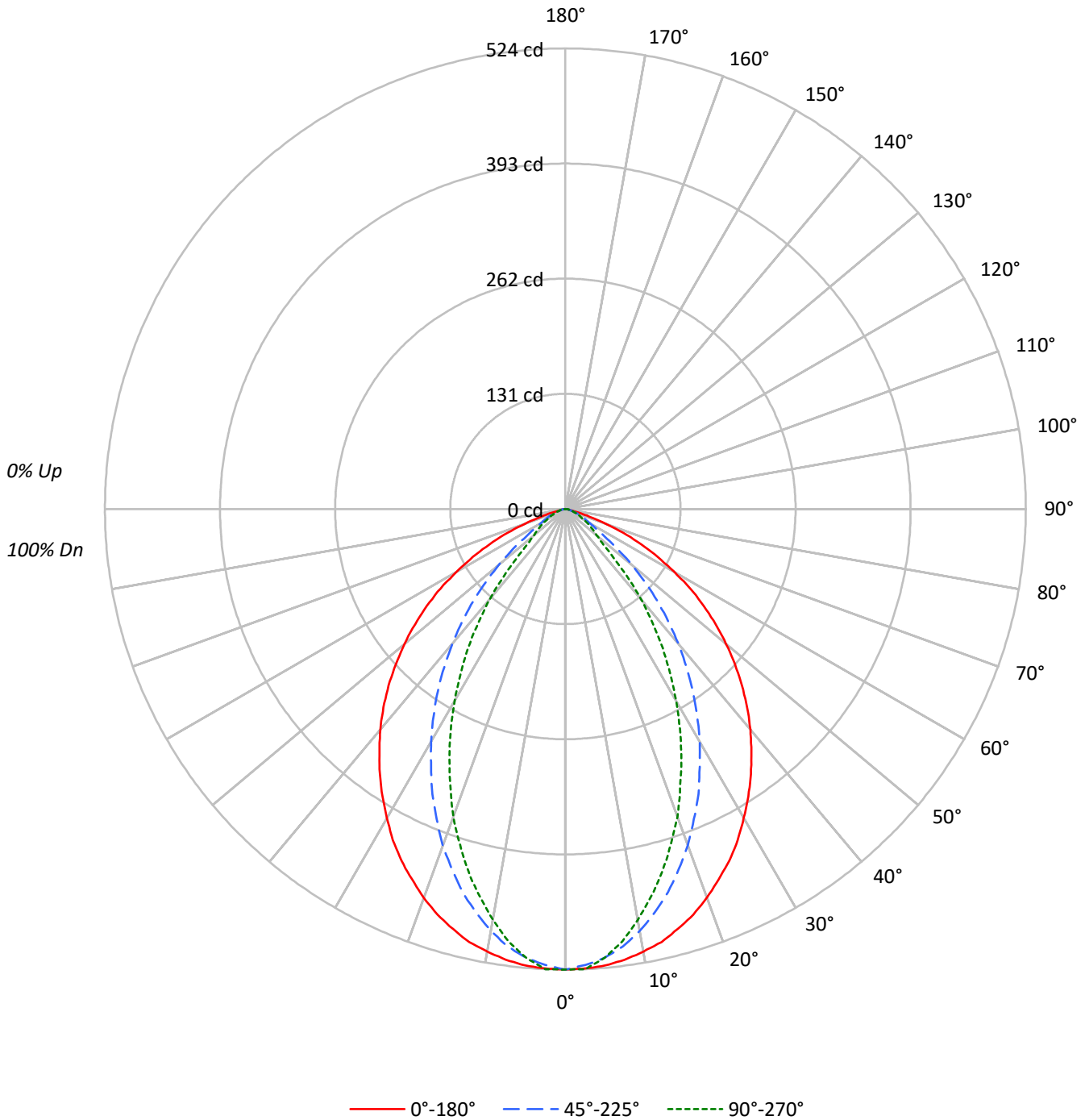
Lumens per Lamp: N/A
Luminaire Lumens: 757.8 lumens
Efficiency: N/A
Efficacy: 43.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	3608	3608	3608
5°	3603	3544	3544
10°	3575	3408	3319
15°	3526	3218	3042
20°	3449	2986	2732
25°	3353	2721	2373
30°	3229	2430	2001
35°	3095	2127	1623
40°	2944	1795	1203
45°	2768	1439	726
50°	2560	1055	499
55°	2310	647	415
60°	1962	441	330
65°	1551	336	261
70°	978	242	215
75°	319	178	178
80°	107	131	159
85°	55	103	103

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2768 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.5	6.4
10°-20°	128.0	16.9
20°-30°	168.3	22.2
30°-40°	165.4	21.8
40°-50°	125.1	16.5
50°-60°	75.9	10.0
60°-70°	35.8	4.7
70°-80°	9.4	1.2
80°-90°	1.4	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°	344.8	45.5
0°-40°	510.2	67.3
0°-60°	711.2	93.8
0°-90°	757.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	757.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	521	520	513	513	513	49
15°	495	481	451	434	427	139
25°	441	408	358	325	312	203
35°	368	319	253	208	193	230
45°	284	224	148	94	75	219
55°	192	132	54	37	35	171
65°	95	49	21	17	16	94
75°	12	8	7	7	7	19
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°	524.0	524.0	524.0	524.0	524.0
2.5°	523.3	523.3	519.3	524.0	524.0
5°	521.3	520.0	512.7	513.3	512.7
7.5°	517.3	514.7	502.0	498.7	496.0
10°	511.3	506.0	487.4	479.4	474.7
12.5°	504.7	495.4	470.1	458.7	451.4
15°	494.7	481.4	451.4	434.1	426.8
17.5°	484.0	464.7	429.4	408.8	399.5
20°	470.7	448.1	407.5	382.2	372.8
22.5°	456.1	429.4	382.2	354.2	341.6
25°	441.4	408.1	358.2	324.9	312.3
27.5°	424.8	386.8	330.9	296.3	282.3
30°	406.1	365.5	305.6	269.6	251.7
32.5°	387.5	343.6	279.0	239.7	221.7
35°	368.2	318.9	253.0	208.4	193.1
37.5°	347.5	295.6	226.4	179.8	161.8
40°	327.6	272.3	199.7	150.5	133.8
42.5°	306.3	249.0	173.1	121.8	103.2
45°	284.3	223.7	147.8	93.9	74.6
47.5°	261.7	201.1	122.5	69.2	55.9
50°	239.0	177.1	98.5	51.3	46.6
52.5°	215.7	153.8	74.6	42.6	40.6
55°	192.4	131.8	53.9	36.6	34.6
57.5°	168.4	107.9	40.6	31.3	29.3
60°	142.5	86.6	32.0	26.0	24.0
62.5°	118.5	67.9	26.0	21.3	20.0
65°	95.2	48.6	20.6	17.3	16.0
67.5°	71.2	32.6	16.0	13.3	13.3
70°	48.6	21.3	12.0	10.7	10.7
72.5°	29.3	12.7	8.7	8.7	8.7
75°	12.0	8.0	6.7	6.7	6.7
77.5°	4.0	4.7	4.7	5.3	5.3
80°	2.7	2.7	3.3	4.0	4.0
82.5°	1.3	2.0	2.0	2.7	2.7
85°	0.7	0.7	1.3	1.3	1.3
87.5°	0.0	0.0	0.0	0.7	0.7
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	13.79	15.12	14.15	15.43	15.75	4.44	5.78	4.81	6.09	6.40
	3H	14.49	15.67	14.87	16.00	16.37	5.23	6.40	5.61	6.73	7.10
	4H	14.51	15.61	14.91	15.96	16.34	5.48	6.57	5.88	6.93	7.31
	6H	14.44	15.45	14.86	15.82	16.21	5.66	6.66	6.07	7.03	7.43
	8H	14.40	15.35	14.83	15.74	16.15	5.70	6.65	6.13	7.04	7.45
	12H	14.36	15.27	14.79	15.65	16.08	5.71	6.62	6.14	7.00	7.43
4H	2H	13.62	14.72	14.02	15.07	15.45	4.93	6.03	5.33	6.38	6.76
	3H	14.36	15.26	14.78	15.66	16.06	5.84	6.73	6.25	7.14	7.54
	4H	14.38	15.18	14.82	15.60	16.04	6.16	6.95	6.59	7.37	7.81
	6H	14.32	15.01	14.78	15.45	15.92	6.42	7.10	6.88	7.55	8.01
	8H	14.27	14.91	14.74	15.36	15.83	6.48	7.12	6.95	7.57	8.04
	12H	14.23	14.79	14.71	15.27	15.75	6.51	7.07	6.99	7.55	8.03
8H	4H	14.27	14.90	14.73	15.35	15.82	6.27	6.91	6.74	7.36	7.83
	6H	14.19	14.71	14.69	15.21	15.69	6.59	7.11	7.09	7.60	8.08
	8H	14.14	14.60	14.66	15.12	15.61	6.69	7.16	7.22	7.68	8.17
	12H	14.10	14.51	14.61	15.00	15.57	6.76	7.17	7.27	7.66	8.23
12H	4H	14.22	14.78	14.71	15.27	15.74	6.24	6.81	6.73	7.29	7.76
	6H	14.13	14.60	14.66	15.11	15.61	6.56	7.02	7.08	7.54	8.03
	8H	14.10	14.51	14.61	15.00	15.58	6.70	7.11	7.22	7.61	8.18