

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: P1062086

Luminaire Tested: S125RDR-H610D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062086
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-H610D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

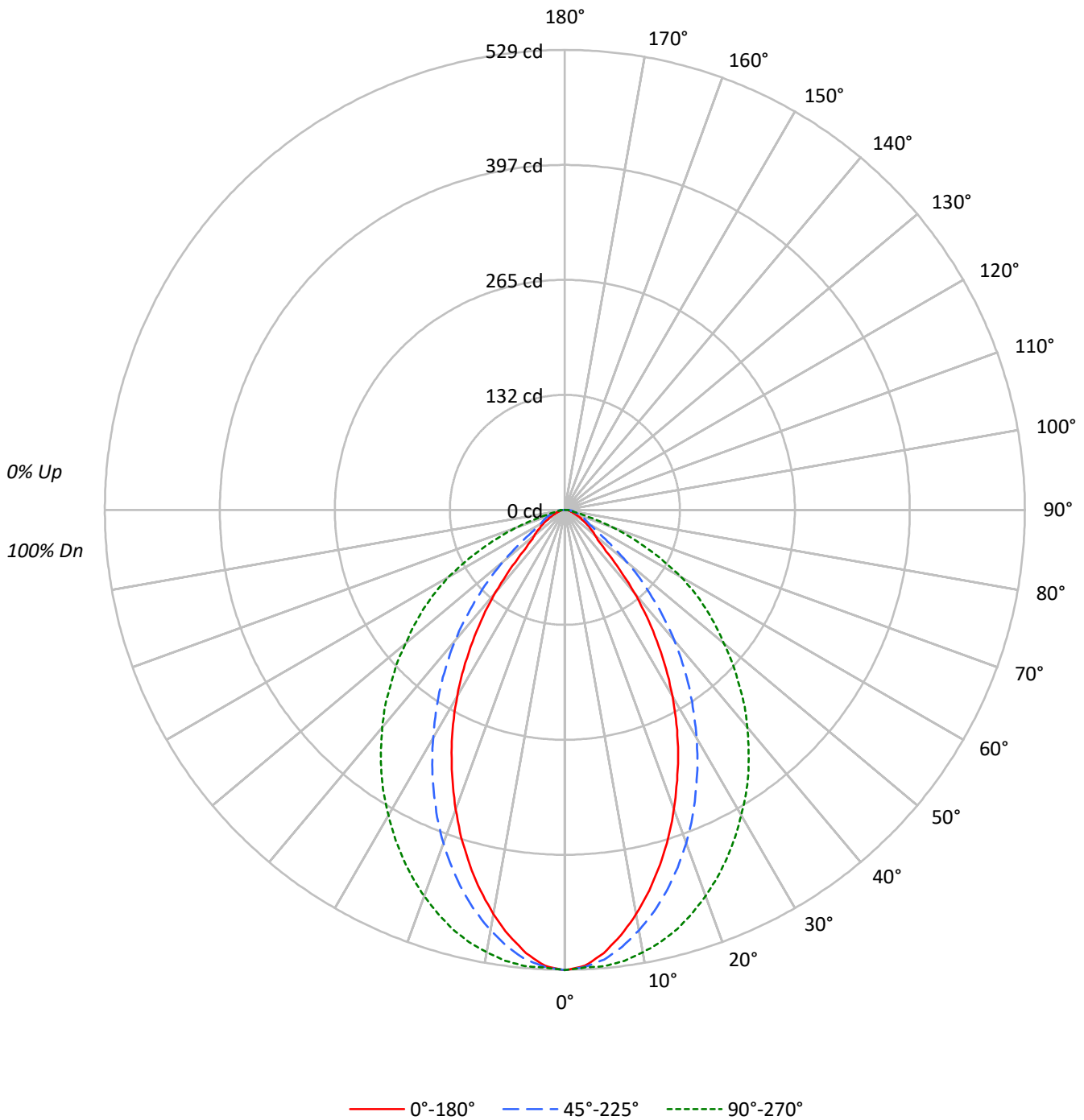
Lumens per Lamp: N/A
Luminaire Lumens: 764.4 lumens
Efficiency: N/A
Efficacy: 43.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	3645	3645	3645
5°	3537	3589	3642
10°	3301	3434	3613
15°	3012	3232	3558
20°	2687	2991	3465
25°	2342	2710	3354
30°	1967	2407	3225
35°	1552	2095	3093
40°	1112	1761	2935
45°	654	1382	2752
50°	484	995	2556
55°	407	603	2374
60°	329	441	2119
65°	256	419	1698
70°	215	393	1149
75°	200	351	500
80°	198	349	325
85°	245	450	348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2752 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.8	6.4
10°-20°	128.1	16.8
20°-30°	167.5	21.9
30°-40°	163.0	21.3
40°-50°	121.8	15.9
50°-60°	75.6	9.9
60°-70°	39.7	5.2
70°-80°	14.5	1.9
80°-90°	5.5	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°	344.4	45.1
0°-40°	507.4	66.4
0°-60°	704.8	92.2
0°-90°	764.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	764.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	529	529	529	529	529	
5°	512	519	519	522	527	48
15°	423	435	453	481	499	118
25°	308	324	357	405	442	141
35°	185	205	249	316	368	115
45°	67	88	142	222	283	57
55°	34	36	50	131	198	31
65°	16	17	26	55	104	16
75°	8	9	13	14	19	8
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	529.4	529.4	529.4	529.4	529.4
2.5°	525.0	529.4	526.2	526.2	526.9
5°	511.8	518.7	519.3	522.5	526.9
7.5°	493.6	501.8	506.8	516.2	523.1
10°	472.2	481.7	491.1	506.8	516.8
12.5°	448.4	459.7	473.5	494.8	509.3
15°	422.6	435.2	453.4	481.0	499.2
17.5°	395.6	408.8	431.4	464.7	486.7
20°	366.7	381.2	408.2	445.9	472.9
22.5°	337.2	353.5	383.1	425.8	457.8
25°	308.3	324.0	356.7	405.0	441.5
27.5°	278.2	294.5	330.3	383.7	423.9
30°	247.4	265.0	302.7	361.7	405.7
32.5°	216.7	234.9	275.7	339.1	387.5
35°	184.6	204.7	249.3	315.9	368.0
37.5°	154.5	175.8	222.3	292.0	347.3
40°	123.7	145.7	195.9	268.8	326.5
42.5°	93.6	116.2	168.9	244.9	305.8
45°	67.2	87.9	141.9	221.7	282.6
47.5°	51.5	63.4	116.8	197.8	261.9
50°	45.2	49.0	92.9	174.6	238.6
52.5°	39.6	42.1	69.1	152.0	218.5
55°	33.9	35.8	50.2	130.6	197.8
57.5°	28.9	30.8	38.3	111.2	176.5
60°	23.9	25.7	32.0	91.7	153.9
62.5°	20.1	20.7	28.9	73.5	128.7
65°	15.7	17.0	25.7	55.3	104.2
67.5°	13.2	13.8	22.6	39.6	80.4
70°	10.7	11.3	19.5	27.6	57.1
72.5°	9.4	9.4	16.3	20.1	36.4
75°	7.5	8.8	13.2	14.4	18.8
77.5°	6.3	8.8	11.3	10.7	10.0
80°	5.0	8.2	8.8	8.8	8.2
82.5°	4.4	6.9	7.5	6.9	6.3
85°	3.1	5.7	5.7	5.7	4.4
87.5°	2.5	5.0	4.4	4.4	3.1
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	4.28	5.63	4.65	5.95	6.26	13.99	15.34	14.35	15.65	15.96
	3H	5.12	6.32	5.50	6.65	7.02	14.90	16.10	15.28	16.43	16.79
	4H	5.48	6.60	5.88	6.95	7.33	15.00	16.11	15.40	16.46	16.85
	6H	5.85	6.88	6.27	7.25	7.64	14.98	16.01	15.40	16.38	16.77
	8H	6.03	7.01	6.46	7.40	7.80	14.97	15.94	15.40	16.33	16.74
	12H	6.20	7.13	6.63	7.51	7.94	14.96	15.89	15.39	16.27	16.70
4H	2H	5.11	6.23	5.51	6.58	6.96	13.84	14.95	14.24	15.30	15.69
	3H	6.17	7.08	6.58	7.49	7.89	14.83	15.74	15.24	16.14	16.55
	4H	6.62	7.44	7.06	7.86	8.30	14.95	15.77	15.39	16.19	16.63
	6H	7.18	7.89	7.64	8.33	8.80	14.99	15.69	15.45	16.14	16.60
	8H	7.44	8.10	7.91	8.55	9.02	14.99	15.65	15.46	16.09	16.56
	12H	7.68	8.26	8.17	8.75	9.22	15.00	15.58	15.48	16.06	16.54
8H	4H	7.18	7.84	7.65	8.28	8.75	14.88	15.54	15.35	15.98	16.46
	6H	7.96	8.50	8.46	8.99	9.47	14.94	15.48	15.44	15.97	16.45
	8H	8.37	8.86	8.89	9.37	9.86	14.97	15.45	15.49	15.97	16.46
	12H	8.79	9.22	9.31	9.71	10.28	15.02	15.45	15.54	15.94	16.51
12H	4H	7.24	7.82	7.72	8.30	8.78	14.84	15.43	15.33	15.91	16.38
	6H	8.10	8.59	8.62	9.10	9.59	14.90	15.39	15.43	15.90	16.40
	8H	8.63	9.06	9.14	9.55	10.12	14.97	15.40	15.48	15.89	16.46