

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: P1062128

Luminaire Tested: S125RDR-H610D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062128  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H610D930-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

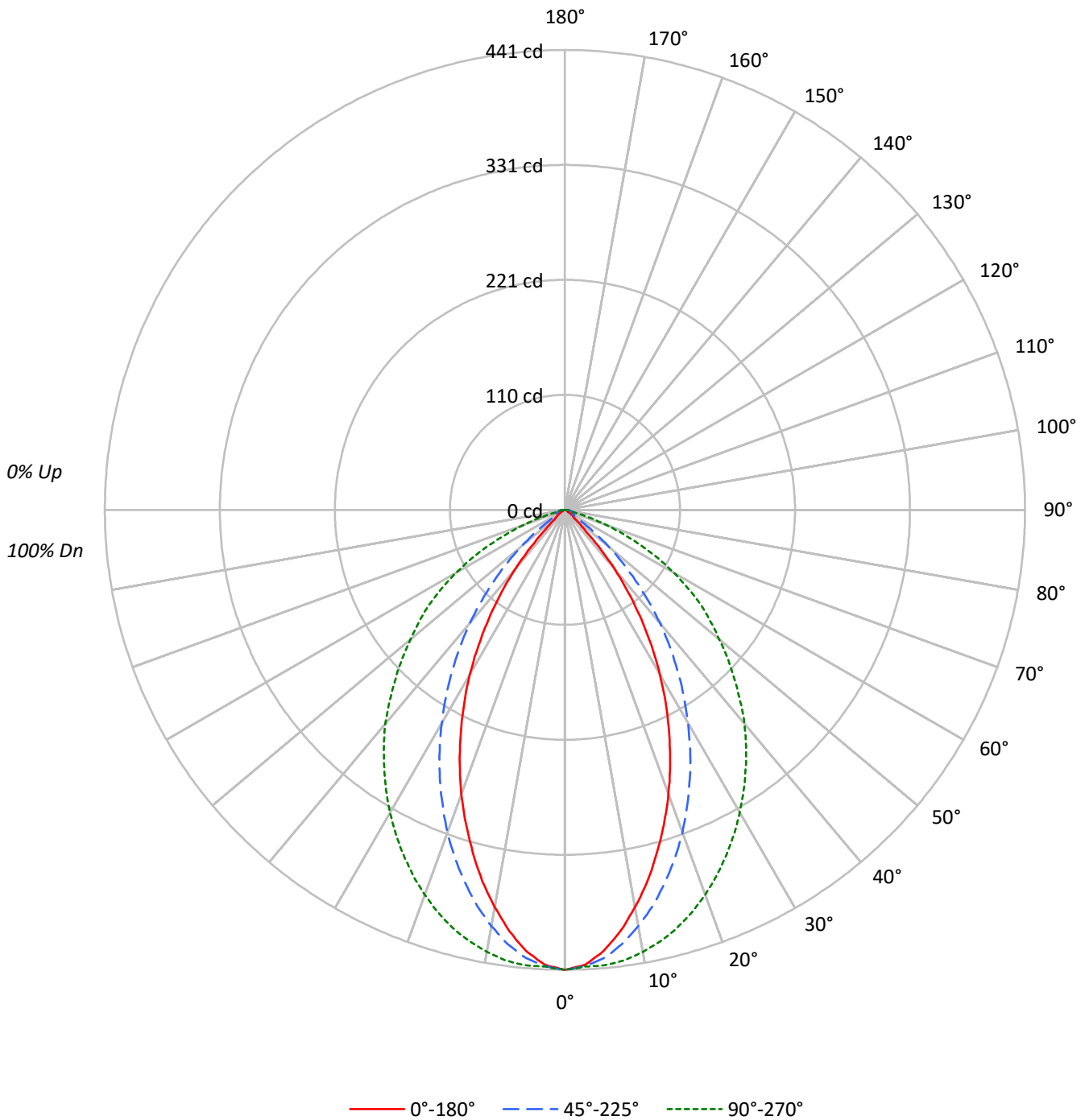
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 567.4 lumens  
Efficiency: N/A  
Efficacy: 32.6 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3037	3037	3037
5°	2936	2982	3030
10°	2704	2834	3008
15°	2428	2637	2959
20°	2126	2412	2878
25°	1795	2155	2777
30°	1447	1875	2665
35°	1064	1580	2539
40°	664	1275	2407
45°	248	931	2238
50°	117	582	2066
55°	85	241	1911
60°	59	127	1654
65°	36	150	1310
70°	32	175	831
75°	43	173	261
80°	63	214	194
85°	126	340	261

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2238 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.4	7.1
10°-20°	104.7	18.5
20°-30°	133.4	23.5
30°-40°	124.2	21.9
40°-50°	85.1	15.0
50°-60°	46.8	8.3
60°-70°	22.2	3.9
70°-80°	7.0	1.2
80°-90°	3.6	0.6
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°	278.6	49.1
0°-40°	402.8	71.0
0°-60°	534.7	94.2
0°-90°	567.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	567.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	441	441	441	441	441	
5°	425	430	431	435	438	39
15°	341	352	370	398	415	95
25°	236	251	284	329	366	108
35°	127	144	188	250	302	78
45°	26	43	96	170	230	24
55°	7	8	20	94	159	6
65°	2	3	9	35	80	2
75°	2	3	6	7	10	2
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	441.1	441.1	441.1	441.1	441.1
2.5°	436.8	441.1	437.9	437.9	438.4
5°	424.8	430.3	431.4	434.6	438.4
7.5°	407.5	414.5	420.0	429.2	435.7
10°	386.8	395.5	405.3	420.5	430.3
12.5°	365.1	374.3	389.0	410.2	423.8
15°	340.6	351.5	370.0	397.7	415.1
17.5°	315.6	327.6	350.4	383.0	404.7
20°	290.1	302.6	329.2	365.6	392.8
22.5°	263.5	277.1	306.4	347.7	379.8
25°	236.3	251.0	283.6	329.2	365.6
27.5°	209.2	224.4	260.2	310.2	351.0
30°	182.0	197.8	235.8	290.7	335.2
32.5°	154.3	171.7	211.9	271.1	318.9
35°	126.6	144.5	188.0	249.9	302.1
37.5°	99.4	117.9	164.6	229.8	285.2
40°	73.9	92.4	141.8	209.7	267.8
42.5°	47.8	67.4	117.9	189.1	248.8
45°	25.5	42.9	95.6	169.5	229.8
47.5°	13.6	22.8	74.4	149.9	211.9
50°	10.9	12.5	54.3	130.4	192.9
52.5°	8.7	9.8	34.8	110.3	176.0
55°	7.1	8.1	20.1	94.5	159.2
57.5°	5.4	6.5	11.4	78.8	139.6
60°	4.3	4.9	9.2	63.0	120.1
62.5°	2.7	3.8	9.2	48.9	100.5
65°	2.2	2.7	9.2	34.8	80.4
67.5°	2.2	2.2	9.2	22.8	60.3
70°	1.6	1.6	8.7	14.7	41.3
72.5°	1.6	1.6	7.6	9.8	23.9
75°	1.6	2.7	6.5	7.1	9.8
77.5°	1.6	4.3	6.0	6.0	5.4
80°	1.6	4.3	5.4	4.9	4.9
82.5°	1.6	4.3	4.3	4.3	3.8
85°	1.6	3.8	4.3	3.8	3.3
87.5°	1.6	3.8	3.8	3.8	2.2
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	0.00	0.00	0.00	0.00	0.00	12.91	14.19	13.27	14.50	14.82
	3H	0.00	0.00	0.00	0.00	0.00	13.69	14.83	14.07	15.16	15.53
	4H	0.00	0.00	0.00	0.00	0.00	13.72	14.78	14.12	15.13	15.51
	6H	0.00	0.00	0.00	0.00	0.00	13.68	14.65	14.09	15.02	15.41
	8H	0.00	0.00	0.00	0.00	0.00	13.65	14.57	14.08	14.96	15.37
	12H	0.00	0.00	0.00	0.00	0.00	13.63	14.51	14.07	14.90	15.33
4H	2H	0.00	0.00	0.00	0.00	0.00	12.69	13.75	13.09	14.10	14.48
	3H	0.00	0.00	0.00	0.00	0.00	13.52	14.38	13.93	14.78	15.19
	4H	0.00	0.00	0.00	0.00	0.00	13.55	14.32	13.99	14.74	15.19
	6H	0.00	0.27	0.07	0.71	1.18	13.54	14.20	14.00	14.65	15.12
	8H	0.33	0.95	0.80	1.40	1.87	13.52	14.14	13.99	14.59	15.06
	12H	1.07	1.62	1.56	2.10	2.58	13.53	14.07	14.01	14.56	15.03
8H	4H	0.18	0.80	0.65	1.25	1.72	13.44	14.06	13.91	14.51	14.98
	6H	1.90	2.41	2.41	2.91	3.39	13.44	13.94	13.94	14.44	14.92
	8H	2.84	3.30	3.37	3.81	4.31	13.44	13.90	13.97	14.42	14.91
	12H	3.78	4.18	4.29	4.67	5.25	13.49	13.89	14.01	14.39	14.96
12H	4H	0.48	1.03	0.97	1.51	1.99	13.40	13.94	13.88	14.43	14.90
	6H	2.36	2.81	2.88	3.33	3.82	13.39	13.85	13.92	14.36	14.86
	8H	3.48	3.88	4.00	4.38	4.95	13.43	13.83	13.95	14.33	14.90