

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: P1058207

Luminaire Tested: S122RDR-H1005D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058207  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-H1005D835-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 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: -

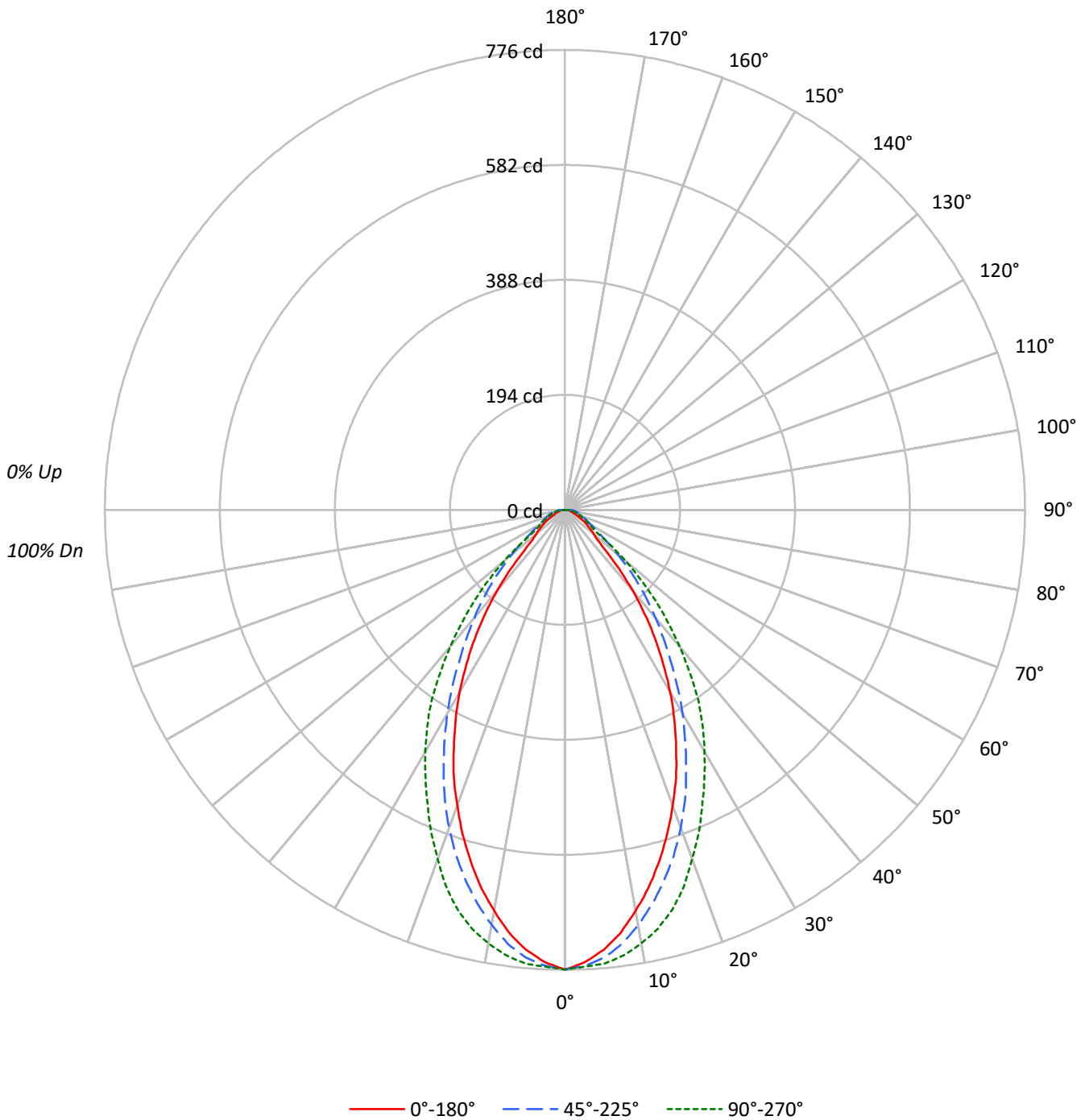
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 935.6 lumens  
Efficiency: N/A  
Efficacy: 25.6 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.5  
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

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

	0°	45°	90°
0°	14312	14312	14312
5°	13809	14048	14233
10°	12871	13326	13916
15°	11728	12356	13340
20°	10425	11211	12308
25°	9032	9848	11159
30°	7562	8446	10031
35°	5963	6994	8833
40°	4273	5721	7238
45°	2503	4517	5600
50°	1809	3287	3778
55°	1518	2348	1979
60°	1214	1901	1690
65°	1000	1685	1563
70°	847	1619	1467
75°	813	1732	1426
80°	914	2125	1520
85°	1524	3324	2117

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5600 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.1	7.6
10°-20°	182.1	19.5
20°-30°	223.8	23.9
30°-40°	197.8	21.1
40°-50°	126.3	13.5
50°-60°	61.6	6.6
60°-70°	36.7	3.9
70°-80°	23.4	2.5
80°-90°	12.9	1.4
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°	476.9	51.0
0°-40°	674.7	72.1
0°-60°	862.6	92.2
0°-90°	935.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	935.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	776	776	776	776	776	
5°	746	761	758	761	768	69
15°	614	631	647	675	698	171
25°	444	459	484	514	548	203
35°	265	279	310	353	392	164
45°	96	123	173	195	215	81
55°	47	63	73	69	62	42
65°	23	43	39	36	36	23
75°	11	26	24	22	20	13
85°	7	14	16	14	10	7
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	775.6	775.6	775.6	775.6	775.6
2.5°	764.1	778.4	769.9	769.9	771.3
5°	745.5	761.3	758.4	761.3	768.4
7.5°	719.8	735.5	738.4	749.8	758.4
10°	686.9	702.6	711.2	729.8	742.7
12.5°	652.5	668.3	681.1	705.5	724.1
15°	613.9	631.0	646.8	675.4	698.3
17.5°	573.8	591.0	611.0	639.6	666.8
20°	530.9	546.6	570.9	598.1	626.8
22.5°	489.4	503.7	529.5	555.2	589.6
25°	443.6	459.3	483.7	513.7	548.1
27.5°	399.2	415.0	439.3	473.6	509.4
30°	354.9	369.2	396.4	432.1	470.8
32.5°	309.1	323.4	353.4	392.1	432.1
35°	264.7	279.0	310.5	353.4	392.1
37.5°	220.4	236.1	271.9	311.9	344.9
40°	177.4	196.0	237.5	271.9	300.5
42.5°	134.5	160.3	204.6	233.2	256.1
45°	95.9	123.1	173.1	194.6	214.6
47.5°	73.0	94.4	143.1	158.8	171.7
50°	63.0	77.3	114.5	125.9	131.6
52.5°	54.4	68.7	91.6	95.9	93.0
55°	47.2	63.0	73.0	68.7	61.5
57.5°	40.1	58.7	60.1	51.5	52.9
60°	32.9	52.9	51.5	44.4	45.8
62.5°	27.2	48.7	44.4	40.1	40.1
65°	22.9	42.9	38.6	35.8	35.8
67.5°	18.6	38.6	34.3	31.5	31.5
70°	15.7	34.3	30.0	27.2	27.2
72.5°	14.3	30.0	27.2	24.3	24.3
75°	11.4	25.8	24.3	21.5	20.0
77.5°	10.0	21.5	21.5	20.0	17.2
80°	8.6	18.6	20.0	17.2	14.3
82.5°	8.6	17.2	17.2	15.7	11.4
85°	7.2	14.3	15.7	14.3	10.0
87.5°	4.3	12.9	12.9	11.4	7.2
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	11.28	12.56	11.64	12.87	13.18	10.80	12.08	11.16	12.39	12.70
	3H	12.45	13.59	12.83	13.92	14.28	12.36	13.50	12.74	13.83	14.20
	4H	12.88	13.94	13.28	14.29	14.67	13.04	14.11	13.45	14.46	14.84
	6H	13.22	14.20	13.64	14.57	14.97	13.69	14.67	14.11	15.04	15.43
	8H	13.42	14.35	13.85	14.74	15.14	13.98	14.90	14.41	15.30	15.70
	12H	13.64	14.53	14.07	14.91	15.34	14.30	15.18	14.73	15.56	15.99
4H	2H	11.78	12.84	12.18	13.19	13.57	11.40	12.46	11.80	12.81	13.19
	3H	13.42	14.29	13.83	14.70	15.10	13.20	14.07	13.61	14.48	14.88
	4H	14.18	14.97	14.62	15.39	15.83	14.04	14.82	14.47	15.24	15.69
	6H	14.79	15.47	15.25	15.91	16.38	14.90	15.58	15.36	16.02	16.49
	8H	15.09	15.72	15.56	16.17	16.64	15.28	15.92	15.75	16.37	16.84
	12H	15.40	15.97	15.89	16.45	16.92	15.72	16.28	16.21	16.77	17.24
8H	4H	14.60	15.24	15.07	15.69	16.16	14.50	15.13	14.97	15.58	16.05
	6H	15.55	16.07	16.05	16.57	17.05	15.61	16.13	16.11	16.63	17.11
	8H	16.10	16.57	16.62	17.08	17.58	16.18	16.65	16.70	17.17	17.66
	12H	16.67	17.08	17.18	17.58	18.15	16.85	17.27	17.37	17.76	18.33
12H	4H	14.67	15.24	15.16	15.72	16.19	14.58	15.14	15.07	15.63	16.10
	6H	15.73	16.20	16.26	16.72	17.21	15.79	16.26	16.31	16.78	17.27
	8H	16.43	16.84	16.95	17.34	17.91	16.50	16.91	17.02	17.41	17.98