

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: P1058414

Luminaire Tested: S122RDR-H485D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058414  
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-H485D935-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, 90 CRI LEDS  
Ballast/Driver: -

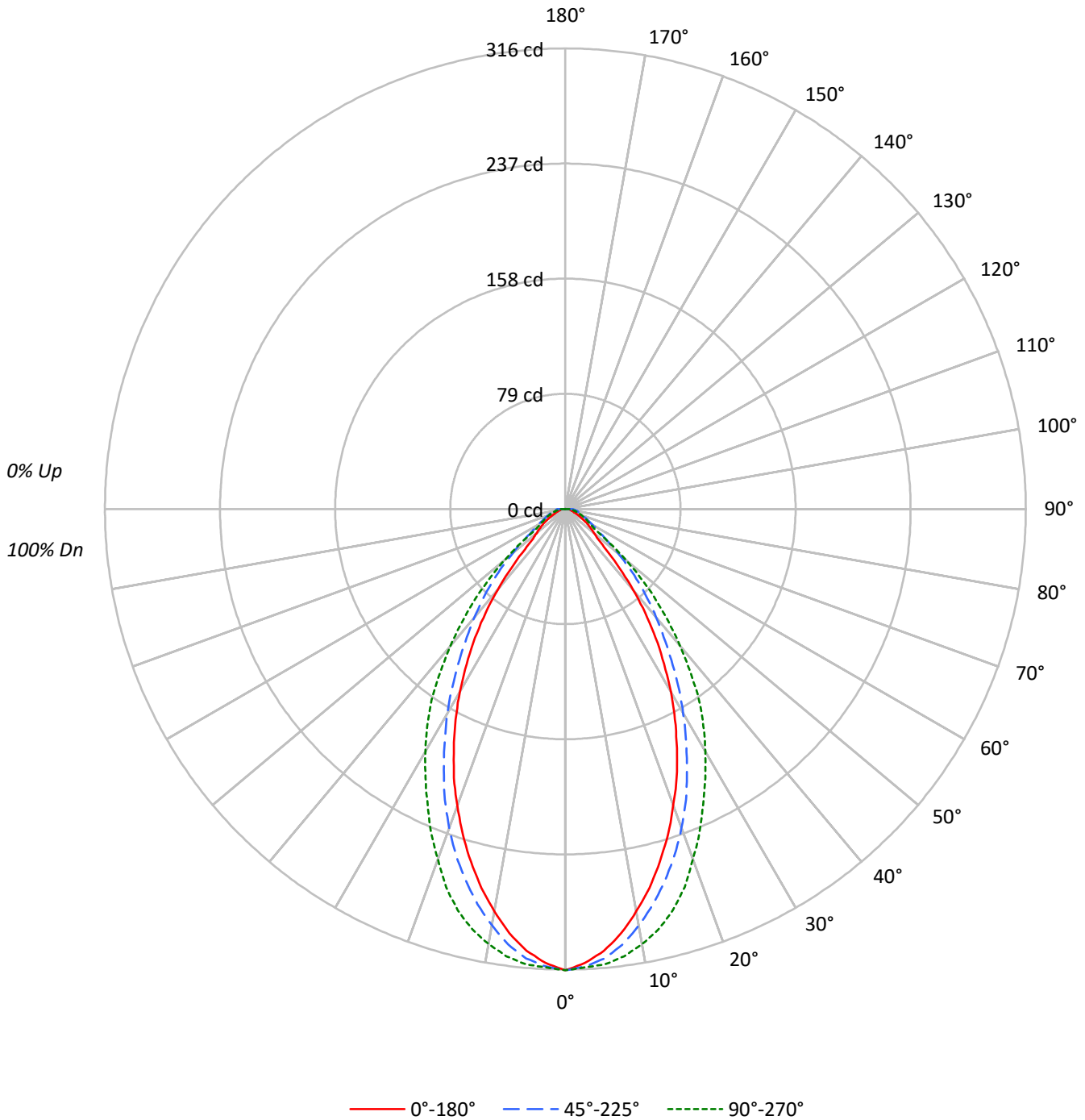
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 381.8 lumens  
Efficiency: N/A  
Efficacy: 21.9 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): 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

TEST NUMBER: P1058414

CATALOG NUMBER: S122RDR-H485D935-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1058414

CATALOG NUMBER: S122RDR-H485D935-X4F0-XX-UDD-SVL-S

**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	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	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	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59			59	
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54	
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50			50	
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46			46	
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42			42	
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39			39	

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

	0°	45°	90°
0°	5840	5840	5840
5°	5635	5733	5809
10°	5252	5438	5679
15°	4785	5041	5444
20°	4253	4575	5023
25°	3685	4019	4553
30°	3085	3447	4093
35°	2433	2854	3604
40°	1744	2334	2953
45°	1020	1845	2286
50°	738	1341	1542
55°	621	959	807
60°	495	775	690
65°	406	690	637
70°	345	664	599
75°	335	706	585
80°	372	871	616
85°	614	1355	868

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2286 cd/sqm



TEST NUMBER: P1058414

CATALOG NUMBER: S122RDR-H485D935-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.0	7.6
10°-20°	74.3	19.5
20°-30°	91.3	23.9
30°-40°	80.7	21.1
40°-50°	51.5	13.5
50°-60°	25.1	6.6
60°-70°	15.0	3.9
70°-80°	9.6	2.5
80°-90°	5.3	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°	194.6	51.0
0°-40°	275.3	72.1
0°-60°	352.0	92.2
0°-90°	381.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	381.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	304	311	310	311	314	28
15°	250	258	264	276	285	70
25°	181	187	197	210	224	83
35°	108	114	127	144	160	67
45°	39	50	71	79	88	33
55°	19	26	30	28	25	17
65°	9	18	16	15	15	9
75°	5	10	10	9	8	5
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



TEST NUMBER: P1058414

CATALOG NUMBER: S122RDR-H485D935-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	316.5	316.5	316.5	316.5	316.5
2.5°	311.8	317.7	314.2	314.2	314.7
5°	304.2	310.7	309.5	310.7	313.6
7.5°	293.7	300.1	301.3	306.0	309.5
10°	280.3	286.7	290.2	297.8	303.1
12.5°	266.3	272.7	278.0	287.9	295.5
15°	250.5	257.5	263.9	275.6	285.0
17.5°	234.2	241.2	249.3	261.0	272.1
20°	216.6	223.1	233.0	244.1	255.8
22.5°	199.7	205.5	216.1	226.6	240.6
25°	181.0	187.4	197.4	209.6	223.6
27.5°	162.9	169.3	179.3	193.3	207.9
30°	144.8	150.7	161.8	176.3	192.1
32.5°	126.1	132.0	144.2	160.0	176.3
35°	108.0	113.9	126.7	144.2	160.0
37.5°	89.9	96.3	110.9	127.3	140.7
40°	72.4	80.0	96.9	110.9	122.6
42.5°	54.9	65.4	83.5	95.2	104.5
45°	39.1	50.2	70.7	79.4	87.6
47.5°	29.8	38.5	58.4	64.8	70.1
50°	25.7	31.5	46.7	51.4	53.7
52.5°	22.2	28.0	37.4	39.1	38.0
55°	19.3	25.7	29.8	28.0	25.1
57.5°	16.4	23.9	24.5	21.0	21.6
60°	13.4	21.6	21.0	18.1	18.7
62.5°	11.1	19.9	18.1	16.4	16.4
65°	9.3	17.5	15.8	14.6	14.6
67.5°	7.6	15.8	14.0	12.8	12.8
70°	6.4	14.0	12.3	11.1	11.1
72.5°	5.8	12.3	11.1	9.9	9.9
75°	4.7	10.5	9.9	8.8	8.2
77.5°	4.1	8.8	8.8	8.2	7.0
80°	3.5	7.6	8.2	7.0	5.8
82.5°	3.5	7.0	7.0	6.4	4.7
85°	2.9	5.8	6.4	5.8	4.1
87.5°	1.8	5.3	5.3	4.7	2.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058414  
 CATALOG NUMBER: S122RDR-H485D935-X4F0-XX-UDD-SVL-S

**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	8.15	9.43	8.52	9.74	10.06	7.68	8.96	8.04	9.27	9.59
	3H	9.33	10.47	9.71	10.80	11.16	9.24	10.38	9.62	10.71	11.07
	4H	9.76	10.82	10.17	11.18	11.56	9.92	10.99	10.33	11.34	11.72
	6H	10.11	11.09	10.52	11.46	11.85	10.57	11.55	10.99	11.92	12.31
	8H	10.31	11.23	10.74	11.62	12.03	10.86	11.79	11.29	12.18	12.58
	12H	10.52	11.41	10.95	11.79	12.22	11.18	12.07	11.61	12.45	12.88
4H	2H	8.66	9.72	9.06	10.07	10.45	8.28	9.34	8.69	9.70	10.08
	3H	10.31	11.18	10.72	11.59	11.99	10.08	10.95	10.49	11.36	11.76
	4H	11.07	11.86	11.51	12.28	12.72	10.93	11.71	11.36	12.13	12.57
	6H	11.68	12.36	12.14	12.80	13.27	11.78	12.46	12.24	12.91	13.37
	8H	11.97	12.61	12.44	13.06	13.53	12.17	12.81	12.64	13.25	13.73
	12H	12.28	12.85	12.77	13.33	13.80	12.61	13.17	13.10	13.66	14.13
8H	4H	11.49	12.13	11.96	12.57	13.05	11.39	12.02	11.86	12.47	12.94
	6H	12.44	12.96	12.95	13.46	13.94	12.49	13.01	13.00	13.51	13.99
	8H	12.99	13.46	13.51	13.97	14.46	13.07	13.54	13.59	14.05	14.55
	12H	13.55	13.96	14.06	14.46	15.03	13.74	14.15	14.25	14.65	15.22
12H	4H	11.56	12.12	12.05	12.61	13.08	11.47	12.03	11.96	12.52	12.99
	6H	12.63	13.10	13.15	13.61	14.10	12.68	13.15	13.20	13.66	14.15
	8H	13.32	13.73	13.83	14.23	14.80	13.39	13.80	13.90	14.30	14.87