

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1057932

Luminaire Tested: S122RDRP-S290D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057932  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S290D935-X4F0-XX-UDD-WVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

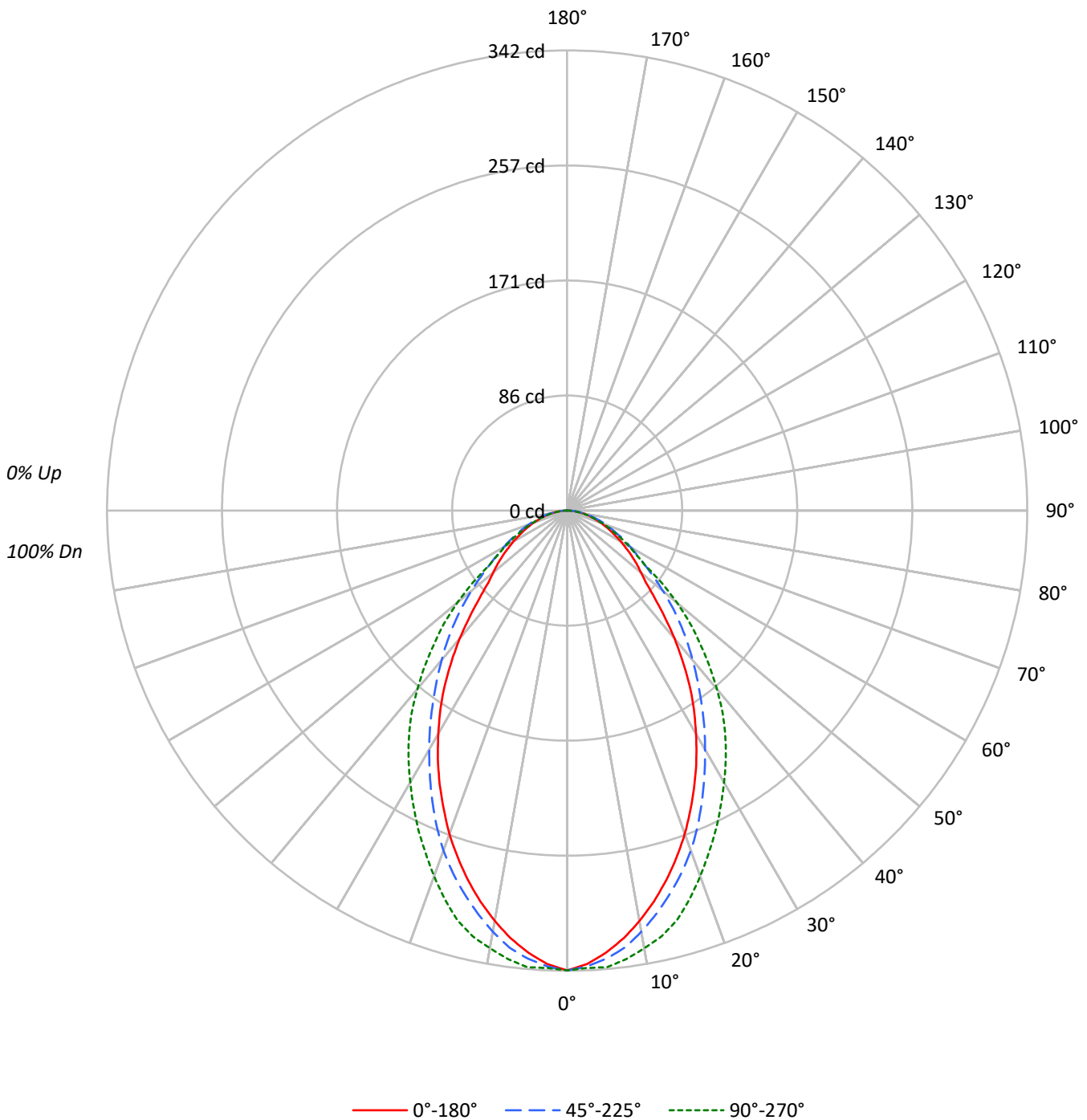
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 557.0 lumens  
Efficiency: N/A  
Efficacy: 44.6 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
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

TEST NUMBER: P1057932

CATALOG NUMBER: S122RDRP-S290D935-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1057932

CATALOG NUMBER: S122RDRP-S290D935-X4F0-XX-UDD-WVL-W

**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	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33

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

	0°	45°	90°
0°	6305	6305	6305
5°	6111	6192	6309
10°	5803	5955	6189
15°	5433	5636	6021
20°	5021	5280	5677
25°	4563	4831	5326
30°	4078	4368	4971
35°	3575	3915	4618
40°	2992	3495	4167
45°	2398	3098	3643
50°	2055	2670	3057
55°	1879	2268	2258
60°	1709	2008	1967
65°	1554	1795	1716
70°	1430	1646	1527
75°	1333	1519	1333
80°	1254	1403	1169
85°	1249	1482	1016

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3643 cd/sqm



TEST NUMBER: P1057932

CATALOG NUMBER: S122RDRP-S290D935-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.5	5.7
10°-20°	83.5	15.0
20°-30°	110.1	19.8
30°-40°	110.9	19.9
40°-50°	90.3	16.2
50°-60°	61.5	11.0
60°-70°	39.9	7.2
70°-80°	22.0	3.9
80°-90°	7.2	1.3
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°	225.2	40.4
0°-40°	336.1	60.3
0°-60°	487.9	87.6
0°-90°	557.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	557.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	342	342	342	342	342	
5°	330	336	334	337	341	31
15°	284	292	295	307	315	80
25°	224	232	237	248	262	103
35°	159	167	174	189	205	99
45°	92	103	119	129	140	72
55°	58	64	70	71	70	52
65°	36	42	41	39	39	35
75°	19	23	21	19	19	20
85°	6	8	7	6	5	6
90°	0	0	0	0	0	



TEST NUMBER: P1057932

CATALOG NUMBER: S122RDRP-S290D935-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	341.7	341.7	341.7	341.7	341.7
2.5°	337.3	342.8	339.1	339.5	340.2
5°	329.9	336.2	334.3	337.3	340.6
7.5°	320.7	327.0	327.7	332.1	336.2
10°	309.7	316.7	317.8	324.4	330.3
12.5°	297.6	305.3	306.8	316.3	324.1
15°	284.4	291.7	295.0	307.2	315.2
17.5°	270.4	277.4	282.5	293.6	302.7
20°	255.7	262.3	268.9	278.9	289.1
22.5°	239.9	247.3	253.5	263.4	275.2
25°	224.1	231.5	237.3	248.0	261.6
27.5°	208.0	215.3	221.2	232.6	247.3
30°	191.4	199.1	205.0	217.9	233.3
32.5°	175.3	183.0	189.6	203.2	219.3
35°	158.7	166.8	173.8	188.8	205.0
37.5°	141.1	150.3	159.1	174.1	189.9
40°	124.2	134.5	145.1	159.1	173.0
42.5°	107.3	118.7	131.9	143.7	156.5
45°	91.9	103.2	118.7	129.0	139.6
47.5°	79.7	89.3	105.8	114.3	123.8
50°	71.6	78.3	93.0	99.6	106.5
52.5°	65.0	70.5	80.8	85.2	88.9
55°	58.4	64.3	70.5	70.9	70.2
57.5°	51.8	58.4	61.7	59.2	60.6
60°	46.3	52.9	54.4	51.8	53.3
62.5°	40.4	47.8	47.8	45.2	45.9
65°	35.6	42.3	41.1	38.9	39.3
67.5°	30.9	37.5	35.6	33.4	33.4
70°	26.5	32.7	30.5	28.3	28.3
72.5°	22.4	27.6	26.1	23.5	23.1
75°	18.7	23.1	21.3	19.1	18.7
77.5°	15.1	18.7	17.3	15.4	14.7
80°	11.8	15.1	13.2	11.8	11.0
82.5°	8.8	11.4	9.9	8.5	7.7
85°	5.9	7.7	7.0	5.5	4.8
87.5°	2.9	5.1	4.4	3.7	2.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1057932  
 CATALOG NUMBER: S122RDRP-S290D935-X4F0-XX-UDD-WVL-W

**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	13.11	14.55	13.48	14.87	15.18	13.37	14.81	13.73	15.12	15.43
	3H	14.65	15.93	15.02	16.26	16.62	14.72	16.01	15.10	16.34	16.70
	4H	15.21	16.41	15.61	16.76	17.14	15.20	16.41	15.60	16.76	17.14
	6H	15.63	16.74	16.05	17.11	17.50	15.55	16.66	15.96	17.03	17.42
	8H	15.78	16.84	16.21	17.23	17.63	15.66	16.72	16.09	17.11	17.51
	12H	15.90	16.91	16.33	17.29	17.72	15.73	16.74	16.16	17.12	17.55
4H	2H	13.69	14.89	14.09	15.24	15.62	13.89	15.09	14.29	15.44	15.82
	3H	15.49	16.49	15.90	16.89	17.29	15.46	16.46	15.87	16.86	17.26
	4H	16.23	17.13	16.67	17.55	17.99	16.05	16.95	16.49	17.37	17.81
	6H	16.82	17.60	17.28	18.04	18.51	16.52	17.30	16.98	17.75	18.21
	8H	17.03	17.76	17.50	18.21	18.67	16.67	17.40	17.14	17.85	18.32
	12H	17.20	17.85	17.68	18.33	18.80	16.78	17.43	17.27	17.91	18.38
8H	4H	16.50	17.23	16.96	17.67	18.14	16.35	17.07	16.81	17.52	17.99
	6H	17.26	17.86	17.75	18.35	18.83	16.94	17.54	17.44	18.03	18.51
	8H	17.58	18.12	18.10	18.63	19.12	17.16	17.70	17.68	18.21	18.70
	12H	17.86	18.34	18.37	18.83	19.40	17.34	17.82	17.85	18.31	18.88
12H	4H	16.51	17.16	17.00	17.64	18.11	16.38	17.03	16.86	17.51	17.98
	6H	17.30	17.84	17.82	18.35	18.84	17.00	17.54	17.52	18.06	18.55
	8H	17.70	18.17	18.21	18.67	19.23	17.29	17.77	17.80	18.26	18.83