

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: P1057929

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057929
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S290D935-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

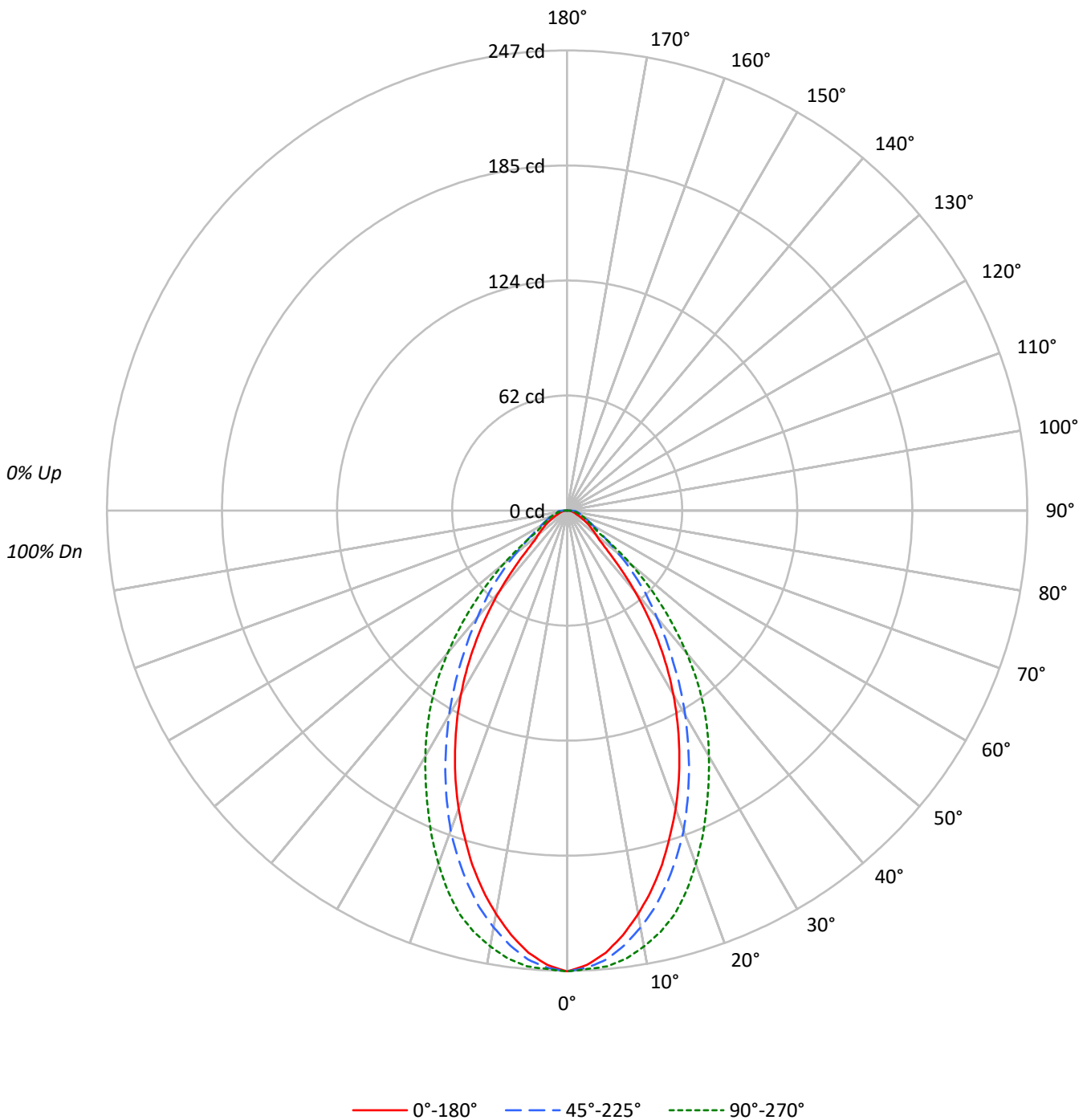
Lumens per Lamp: N/A
Luminaire Lumens: 300.1 lumens
Efficiency: N/A
Efficacy: 24.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (A_{in}): 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: P1057929

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

Luminous Intensity Polar Plot





TEST NUMBER: P1057929

CATALOG NUMBER: S122RDRP-S290D935-X4F0-XX-UDD-SVL-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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	4565	4565	4565
5°	4412	4481	4549
10°	4118	4257	4450
15°	3758	3954	4277
20°	3342	3588	3963
25°	2897	3152	3600
30°	2429	2702	3243
35°	1912	2237	2874
40°	1363	1807	2399
45°	806	1430	1861
50°	580	1033	1266
55°	486	746	640
60°	395	598	543
65°	323	528	498
70°	275	518	475
75°	264	528	471
80°	276	627	510
85°	381	1016	614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1861 cd/sqm



TEST NUMBER: P1057929

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.7	7.6
10°-20°	58.3	19.4
20°-30°	71.9	24.0
30°-40°	64.0	21.3
40°-50°	40.8	13.6
50°-60°	19.6	6.5
60°-70°	11.5	3.8
70°-80°	7.4	2.5
80°-90°	3.9	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°	152.9	51.0
0°-40°	216.9	72.3
0°-60°	277.3	92.4
0°-90°	300.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	300.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	247	247	247	247	247	
5°	238	243	242	243	246	22
15°	197	202	207	216	224	55
25°	142	148	155	166	177	65
35°	85	92	99	114	128	53
45°	31	40	55	64	71	26
55°	15	20	23	22	20	14
65°	7	13	12	11	11	7
75°	4	8	7	7	7	4
85°	2	4	5	4	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1057929

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	247.4	247.4	247.4	247.4	247.4
2.5°	244.1	248.2	245.6	245.6	246.3
5°	238.2	242.6	241.9	243.4	245.6
7.5°	229.8	234.6	235.3	239.3	242.6
10°	219.8	225.0	227.2	233.1	237.5
12.5°	208.8	214.0	218.0	225.4	231.6
15°	196.7	201.5	207.0	216.5	223.9
17.5°	183.4	189.7	195.2	205.1	213.6
20°	170.2	176.1	182.7	192.3	201.8
22.5°	156.6	162.1	168.7	178.7	189.7
25°	142.3	147.8	154.8	165.8	176.8
27.5°	128.3	133.8	140.4	152.6	164.3
30°	114.0	119.5	126.8	139.3	152.2
32.5°	99.6	105.5	112.9	126.5	140.1
35°	84.9	91.5	99.3	114.3	127.6
37.5°	70.6	77.2	86.8	101.5	114.0
40°	56.6	64.3	75.0	88.2	99.6
42.5°	43.0	51.5	64.7	75.4	85.3
45°	30.9	40.1	54.8	63.6	71.3
47.5°	23.5	30.1	45.2	52.2	57.7
50°	20.2	24.3	36.0	41.2	44.1
52.5°	17.6	21.3	28.7	31.2	31.2
55°	15.1	19.5	23.2	22.4	19.9
57.5°	12.9	17.6	19.1	16.2	16.9
60°	10.7	16.2	16.2	14.3	14.7
62.5°	8.8	15.1	14.0	12.5	12.9
65°	7.4	13.2	12.1	11.0	11.4
67.5°	5.9	11.8	10.7	9.9	9.9
70°	5.1	10.7	9.6	8.8	8.8
72.5°	4.4	9.2	8.5	7.7	7.7
75°	3.7	8.1	7.4	7.0	6.6
77.5°	3.3	7.0	6.6	5.9	5.5
80°	2.6	5.9	5.9	5.5	4.8
82.5°	2.2	5.1	5.1	4.8	4.0
85°	1.8	4.4	4.8	4.0	2.9
87.5°	1.5	4.0	4.0	3.3	2.2
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1057929

CATALOG NUMBER: S122RDRP-S290D935-X4F0-XX-UDD-SVL-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	6.94	8.21	7.30	8.53	8.84	6.74	8.02	7.11	8.33	8.65
	3H	8.18	9.31	8.56	9.64	10.01	8.33	9.46	8.71	9.79	10.16
	4H	8.63	9.69	9.03	10.04	10.42	9.04	10.10	9.44	10.45	10.84
	6H	9.01	9.99	9.43	10.36	10.75	9.70	10.67	10.11	11.04	11.43
	8H	9.17	10.09	9.60	10.48	10.89	10.02	10.94	10.45	11.33	11.74
	12H	9.32	10.20	9.75	10.59	11.02	10.31	11.20	10.75	11.58	12.01
4H	2H	7.48	8.54	7.89	8.89	9.28	7.33	8.39	7.74	8.74	9.13
	3H	9.19	10.06	9.60	10.47	10.87	9.16	10.03	9.58	10.44	10.84
	4H	9.99	10.77	10.42	11.19	11.63	10.04	10.82	10.47	11.24	11.68
	6H	10.64	11.31	11.10	11.76	12.23	10.88	11.56	11.35	12.01	12.47
	8H	10.88	11.52	11.35	11.96	12.43	11.31	11.94	11.78	12.39	12.86
	12H	11.12	11.68	11.61	12.17	12.64	11.70	12.26	12.19	12.74	13.22
8H	4H	10.41	11.04	10.88	11.49	11.96	10.46	11.09	10.93	11.54	12.01
	6H	11.39	11.91	11.89	12.40	12.89	11.54	12.06	12.05	12.56	13.04
	8H	11.87	12.34	12.40	12.86	13.35	12.13	12.60	12.66	13.12	13.61
	12H	12.37	12.78	12.88	13.28	13.85	12.73	13.14	13.24	13.63	14.21
12H	4H	10.48	11.04	10.96	11.52	11.99	10.53	11.09	11.02	11.58	12.05
	6H	11.55	12.02	12.08	12.54	13.03	11.71	12.17	12.23	12.69	13.18
	8H	12.18	12.60	12.70	13.09	13.66	12.42	12.83	12.93	13.33	13.90