

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: P1058249

Luminaire Tested: S122RDR-H1005D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D935-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

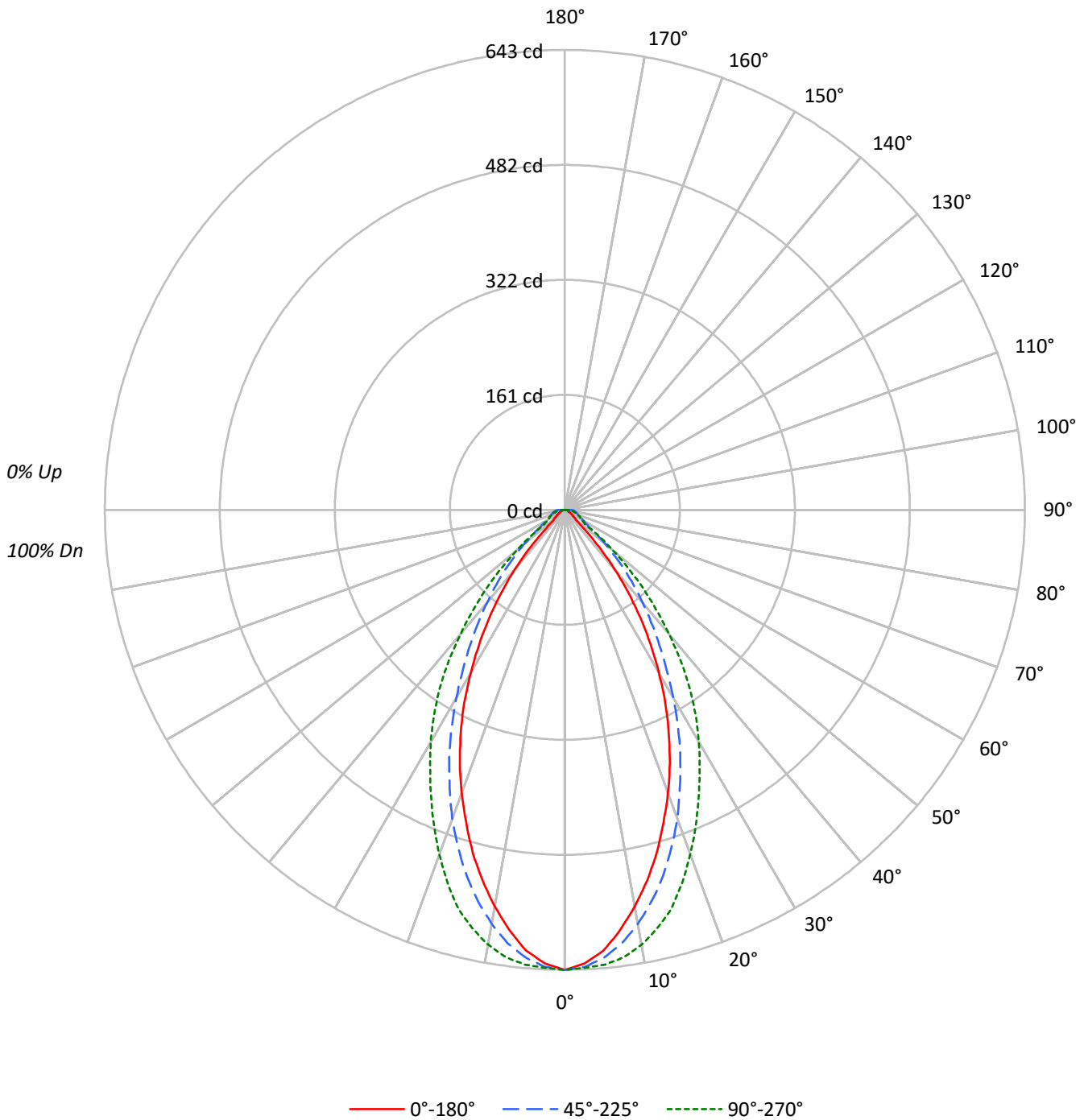
Lumens per Lamp: N/A
Luminaire Lumens: 693.4 lumens
Efficiency: N/A
Efficacy: 19.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1058249

CATALOG NUMBER: S122RDR-H1005D935-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1058249

CATALOG NUMBER: S122RDR-H1005D935-X4F0-XX-UDD-BVL-S

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	97	98	96	95	95	93	92	90													90															
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81													81															
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74													74															
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67													67															
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61													61															
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57													57															
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52													52															
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48													48															
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45													45															
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42													42															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11869	11869	11869
5°	11458	11640	11823
10°	10551	11014	11566
15°	9487	10123	11017
20°	8275	9025	10066
25°	7000	7778	9007
30°	5593	6458	7982
35°	4136	5190	6857
40°	2611	4066	5461
45°	1028	3056	4019
50°	531	2053	2477
55°	438	1348	1110
60°	317	1092	1000
65°	271	1022	1022
70°	264	1063	998
75°	349	1233	1055
80°	521	1573	1180
85°	783	2604	1567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 5203 cd/sqm



TEST NUMBER: P1058249

CATALOG NUMBER: S122RDR-H1005D935-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.8	8.5
10°-20°	148.6	21.4
20°-30°	176.6	25.5
30°-40°	146.9	21.2
40°-50°	82.0	11.8
50°-60°	33.2	4.8
60°-70°	21.2	3.1
70°-80°	15.9	2.3
80°-90°	10.1	1.5
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°	384.0	55.4
0°-40°	530.9	76.6
0°-60°	646.1	93.2
0°-90°	693.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	693.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	643	643	643	643	643	
5°	619	630	628	633	638	57
15°	497	511	530	557	577	138
25°	344	357	382	412	442	157
35°	184	201	230	269	304	114
45°	39	66	117	137	154	37
55°	14	28	42	41	34	12
65°	6	25	23	22	23	6
75°	5	17	17	16	15	5
85°	4	11	12	11	7	4
90°	0	0	0	0	0	



TEST NUMBER: P1058249

CATALOG NUMBER: S122RDR-H1005D935-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	643.2	643.2	643.2	643.2	643.2
2.5°	634.6	644.5	639.5	639.5	640.8
5°	618.6	629.7	628.4	633.4	638.3
7.5°	592.7	605.0	611.2	622.3	630.9
10°	563.1	576.7	587.8	605.0	617.3
12.5°	531.1	544.6	560.7	582.8	598.9
15°	496.6	511.4	529.9	557.0	576.7
17.5°	458.4	474.4	495.4	524.9	545.9
20°	421.4	437.4	459.6	489.2	512.6
22.5°	383.2	396.8	420.2	449.8	478.1
25°	343.8	357.3	382.0	411.6	442.4
27.5°	304.4	317.9	342.6	373.4	407.9
30°	262.5	277.3	303.1	337.6	374.6
32.5°	223.0	237.8	264.9	303.1	340.1
35°	183.6	200.9	230.4	268.6	304.4
37.5°	145.4	165.1	198.4	234.1	266.2
40°	108.4	129.4	168.8	199.6	226.7
42.5°	71.5	96.1	141.7	167.6	188.5
45°	39.4	66.5	117.1	136.8	154.0
47.5°	22.2	43.1	92.4	108.4	118.3
50°	18.5	32.0	71.5	82.6	86.3
52.5°	14.8	29.6	54.2	60.4	57.9
55°	13.6	28.3	41.9	40.7	34.5
57.5°	11.1	28.3	33.3	29.6	29.6
60°	8.6	27.1	29.6	25.9	27.1
62.5°	7.4	25.9	27.1	24.6	24.6
65°	6.2	24.6	23.4	22.2	23.4
67.5°	4.9	22.2	22.2	20.9	20.9
70°	4.9	20.9	19.7	18.5	18.5
72.5°	4.9	18.5	18.5	17.3	17.3
75°	4.9	17.3	17.3	16.0	14.8
77.5°	4.9	14.8	16.0	14.8	13.6
80°	4.9	13.6	14.8	13.6	11.1
82.5°	4.9	12.3	13.6	12.3	9.9
85°	3.7	11.1	12.3	11.1	7.4
87.5°	3.7	11.1	12.3	9.9	6.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1058249
 CATALOG NUMBER: S122RDR-H1005D935-X4F0-XX-UDD-BVL-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	6.95	8.17	7.32	8.48	8.80	8.04	9.26	8.41	9.57	9.89
	3H	8.28	9.37	8.67	9.70	10.07	10.07	11.15	10.45	11.48	11.85
	4H	8.86	9.87	9.26	10.22	10.61	11.02	12.03	11.43	12.38	12.77
	6H	9.42	10.35	9.84	10.73	11.12	11.97	12.90	12.39	13.27	13.67
	8H	9.75	10.63	10.18	11.02	11.43	12.42	13.30	12.86	13.69	14.10
	12H	10.06	10.90	10.49	11.28	11.71	12.85	13.69	13.28	14.07	14.50
4H	2H	7.92	8.93	8.32	9.28	9.66	8.72	9.73	9.12	10.08	10.46
	3H	9.94	10.78	10.36	11.18	11.59	11.00	11.83	11.41	12.23	12.64
	4H	11.03	11.78	11.47	12.20	12.64	12.14	12.89	12.58	13.31	13.76
	6H	11.90	12.55	12.37	13.00	13.47	13.32	13.97	13.78	14.41	14.88
	8H	12.31	12.92	12.78	13.37	13.84	13.88	14.49	14.35	14.94	15.41
	12H	12.69	13.23	13.18	13.71	14.19	14.43	14.96	14.91	15.45	15.92
8H	4H	11.80	12.41	12.27	12.86	13.33	12.70	13.30	13.17	13.75	14.22
	6H	13.15	13.64	13.65	14.14	14.62	14.16	14.65	14.66	15.15	15.63
	8H	13.86	14.31	14.38	14.82	15.31	14.92	15.36	15.44	15.88	16.37
	12H	14.55	14.94	15.07	15.44	16.01	15.71	16.10	16.22	16.60	17.17
12H	4H	11.96	12.49	12.45	12.98	13.45	12.80	13.34	13.29	13.82	14.30
	6H	13.47	13.91	13.99	14.43	14.92	14.38	14.83	14.91	15.35	15.84
	8H	14.37	14.76	14.88	15.26	15.83	15.29	15.68	15.81	16.18	16.75