

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: P1057994

Luminaire Tested: S122RDRP-S485D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057994
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D927-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

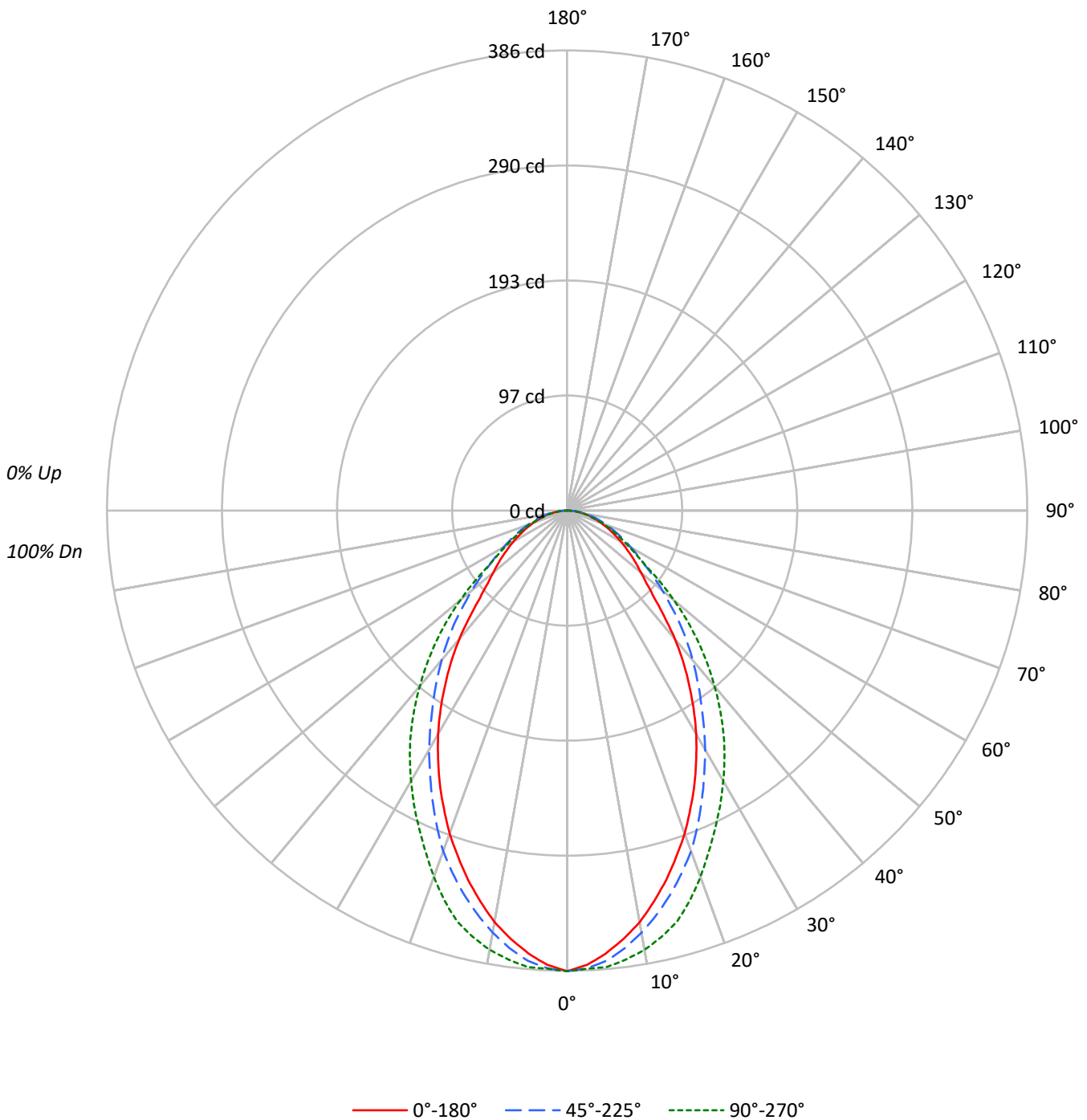
Lumens per Lamp: N/A
Luminaire Lumens: 629.2 lumens
Efficiency: N/A
Efficacy: 32.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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: P1057994

CATALOG NUMBER: S122RDRP-S485D927-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1057994

CATALOG NUMBER: S122RDRP-S485D927-X4F0-XX-UDD-WVL-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	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	99	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	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	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	45	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	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7130	7130	7130
5°	6907	7022	7117
10°	6567	6736	7010
15°	6128	6375	6814
20°	5661	5970	6421
25°	5149	5446	5984
30°	4613	4935	5580
35°	4016	4408	5154
40°	3392	3946	4635
45°	2693	3484	4053
50°	2320	2994	3364
55°	2110	2561	2580
60°	1926	2277	2192
65°	1764	2056	1934
70°	1635	1904	1726
75°	1519	1797	1519
80°	1435	1732	1371
85°	1419	1778	1186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4053 cd/sqm



TEST NUMBER: P1057994

CATALOG NUMBER: S122RDRP-S485D927-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.7	5.7
10°-20°	94.3	15.0
20°-30°	124.1	19.7
30°-40°	124.8	19.8
40°-50°	101.1	16.1
50°-60°	69.6	11.1
60°-70°	45.6	7.2
70°-80°	25.4	4.0
80°-90°	8.6	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°	254.1	40.4
0°-40°	378.8	60.2
0°-60°	549.6	87.4
0°-90°	629.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	629.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	386	386	386	386	386	
5°	373	380	379	381	384	35
15°	321	329	334	346	357	90
25°	253	260	268	279	294	116
35°	178	187	196	213	229	111
45°	103	115	134	145	155	82
55°	66	73	80	81	80	59
65°	40	48	47	45	44	40
75°	21	26	25	22	21	23
85°	7	9	8	7	6	7
90°	0	0	0	0	0	



TEST NUMBER: P1057994

CATALOG NUMBER: S122RDRP-S485D927-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	386.4	386.4	386.4	386.4	386.4
2.5°	381.4	388.1	384.2	384.2	384.7
5°	372.9	380.2	379.1	380.8	384.2
7.5°	362.3	370.1	370.1	375.2	379.7
10°	350.5	358.4	359.5	367.3	374.1
12.5°	335.9	343.8	347.1	357.2	366.2
15°	320.8	328.6	333.7	346.0	356.7
17.5°	304.5	312.4	319.1	332.0	342.7
20°	288.3	295.5	304.0	315.2	327.0
22.5°	270.3	278.2	286.0	296.7	310.1
25°	252.9	259.7	267.5	279.3	293.9
27.5°	234.4	241.7	249.0	263.0	278.2
30°	216.5	223.8	231.6	246.2	261.9
32.5°	197.4	205.3	213.1	229.4	245.6
35°	178.3	186.8	195.7	213.1	228.8
37.5°	159.8	168.8	179.5	197.4	210.9
40°	140.8	150.3	163.8	179.5	192.4
42.5°	120.6	132.4	148.6	162.1	173.9
45°	103.2	115.0	133.5	145.3	155.3
47.5°	90.3	99.8	117.8	127.9	136.3
50°	80.8	88.0	104.3	111.6	117.2
52.5°	72.9	80.2	91.4	96.5	98.1
55°	65.6	72.9	79.6	81.3	80.2
57.5°	58.3	66.2	70.1	68.4	68.4
60°	52.2	60.6	61.7	59.4	59.4
62.5°	46.0	54.4	54.4	51.6	51.6
65°	40.4	48.2	47.1	44.9	44.3
67.5°	35.3	42.6	40.9	38.7	38.1
70°	30.3	37.0	35.3	32.5	32.0
72.5°	25.8	32.0	29.7	27.5	26.4
75°	21.3	26.4	25.2	22.4	21.3
77.5°	17.4	21.3	20.2	17.9	16.8
80°	13.5	16.8	16.3	14.0	12.9
82.5°	10.1	12.9	12.3	10.7	9.0
85°	6.7	9.0	8.4	7.3	5.6
87.5°	3.4	6.2	5.6	5.0	2.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1057994
 CATALOG NUMBER: S122RDRP-S485D927-X4F0-XX-UDD-WVL-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	13.56	15.00	13.92	15.31	15.62	13.91	15.35	14.28	15.67	15.98
	3H	15.10	16.39	15.48	16.72	17.08	15.26	16.55	15.64	16.88	17.24
	4H	15.67	16.88	16.07	17.23	17.61	15.74	16.95	16.14	17.30	17.68
	6H	16.10	17.22	16.51	17.58	17.98	16.09	17.21	16.51	17.58	17.97
	8H	16.26	17.32	16.68	17.71	18.11	16.21	17.27	16.64	17.66	18.06
	12H	16.37	17.38	16.80	17.77	18.20	16.29	17.30	16.72	17.68	18.11
4H	2H	14.14	15.35	14.54	15.70	16.08	14.43	15.63	14.83	15.98	16.36
	3H	15.96	16.96	16.37	17.36	17.77	16.00	17.00	16.41	17.40	17.80
	4H	16.71	17.61	17.14	18.03	18.47	16.60	17.50	17.04	17.92	18.36
	6H	17.30	18.08	17.76	18.52	18.99	17.08	17.87	17.54	18.31	18.77
	8H	17.51	18.24	17.97	18.68	19.15	17.25	17.98	17.71	18.43	18.89
	12H	17.67	18.33	18.16	18.81	19.28	17.37	18.02	17.85	18.50	18.97
8H	4H	16.99	17.73	17.46	18.17	18.64	16.90	17.64	17.37	18.08	18.55
	6H	17.75	18.35	18.25	18.85	19.33	17.52	18.12	18.02	18.62	19.10
	8H	18.07	18.62	18.59	19.13	19.62	17.77	18.31	18.29	18.83	19.31
	12H	18.36	18.84	18.87	19.33	19.90	17.98	18.46	18.49	18.96	19.52
12H	4H	17.01	17.67	17.50	18.15	18.62	16.94	17.59	17.42	18.07	18.54
	6H	17.81	18.35	18.33	18.86	19.35	17.60	18.14	18.11	18.65	19.14
	8H	18.21	18.69	18.72	19.18	19.75	17.92	18.40	18.43	18.89	19.46