

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: P1057994

Luminaire Tested: S122RDR-S485D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S122RDR-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

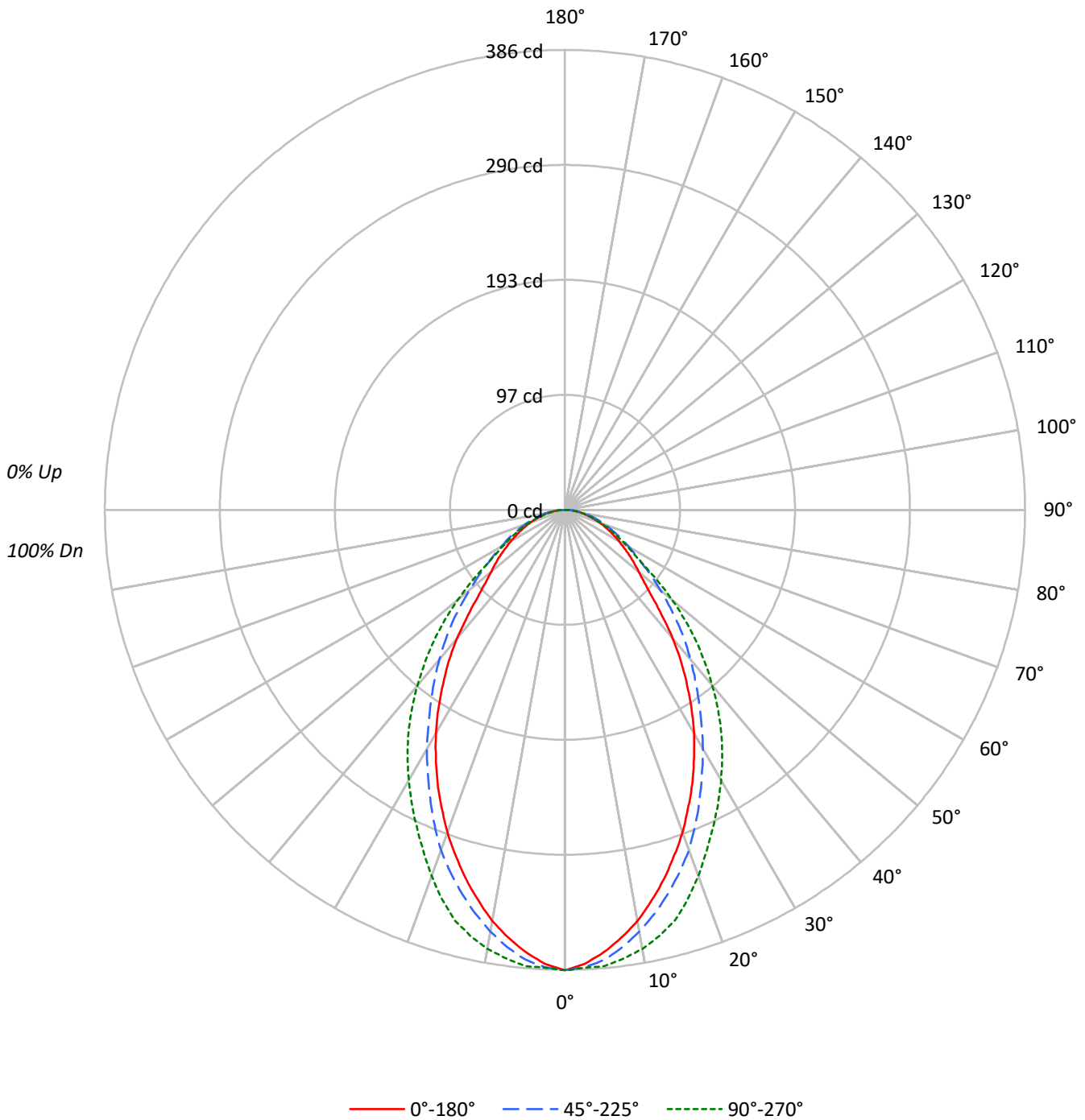
Lumens per Lamp: N/A
Luminaire Lumens: 629.2 lumens
Efficiency: N/A
Efficacy: 32.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: S122RDR-S485D927-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1057994

CATALOG NUMBER: S122RDR-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	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: S122RDR-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: S122RDR-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

(END OF REPORT)