

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: P1057990

Luminaire Tested: S122RDR-S485D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057990
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D927-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

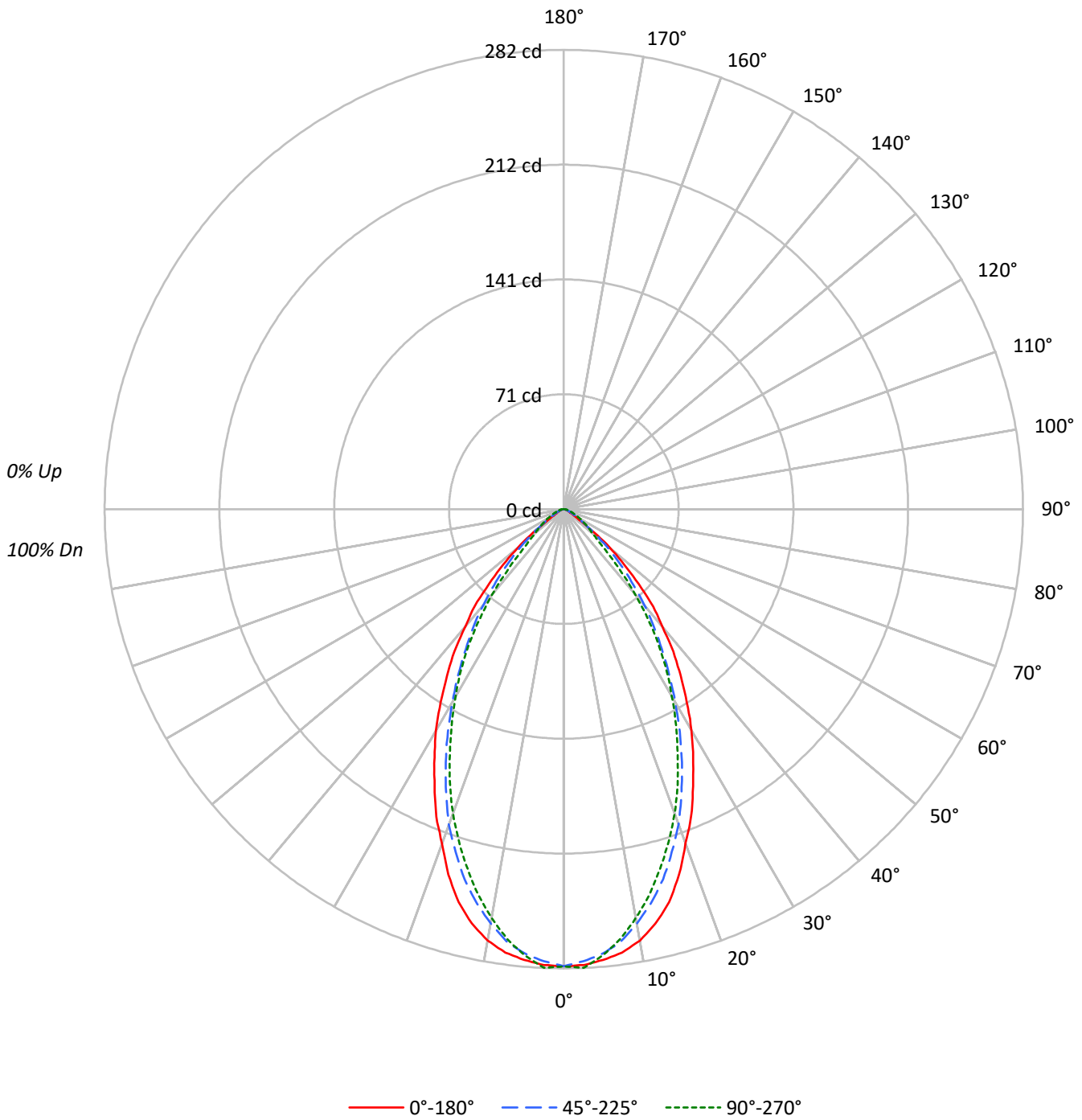
Lumens per Lamp: N/A
Luminaire Lumens: 301.9 lumens
Efficiency: N/A
Efficacy: 15.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1057990

CATALOG NUMBER: S122RDR-S485D927-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1057990

CATALOG NUMBER: S122RDR-S485D927-X4F0-XX-UDD-SVL-B

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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5180	5180	5180
5°	5148	5075	5096
10°	5040	4840	4778
15°	4774	4497	4367
20°	4291	4049	3906
25°	3822	3492	3366
30°	3343	2913	2830
35°	2816	2361	2284
40°	2267	1862	1648
45°	1696	1347	979
50°	1062	870	643
55°	360	470	524
60°	207	288	413
65°	148	196	319
70°	119	151	243
75°	78	121	200
80°	64	117	181
85°	0	0	127

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1696 cd/sqm



TEST NUMBER: P1057990

CATALOG NUMBER: S122RDR-S485D927-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.9	8.6
10°-20°	66.2	21.9
20°-30°	79.8	26.4
30°-40°	68.1	22.6
40°-50°	39.9	13.2
50°-60°	14.4	4.8
60°-70°	5.1	1.7
70°-80°	2.0	0.7
80°-90°	0.4	0.1
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°	171.9	56.9
0°-40°	240.0	79.5
0°-60°	294.4	97.5
0°-90°	301.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	301.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	281	281	281	281	281	
5°	278	278	274	275	275	26
15°	250	246	235	231	229	69
25°	188	180	172	169	165	86
35°	125	115	105	104	101	78
45°	65	58	52	43	38	50
55°	11	16	15	15	16	14
65°	3	4	4	6	7	4
75°	1	2	2	2	3	1
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



TEST NUMBER: P1057990

CATALOG NUMBER: S122RDR-S485D927-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	280.7	280.7	280.7	280.7	280.7
2.5°	280.2	280.7	277.9	280.7	281.9
5°	277.9	278.5	274.0	275.1	275.1
7.5°	274.6	274.0	267.9	266.7	266.2
10°	269.0	267.3	258.3	256.6	255.0
12.5°	260.6	257.2	247.7	244.9	242.6
15°	249.9	246.0	235.4	230.9	228.6
17.5°	235.4	230.9	220.8	216.3	214.1
20°	218.5	214.1	206.2	201.2	198.9
22.5°	204.5	197.3	188.8	185.5	182.7
25°	187.7	179.9	171.5	168.7	165.3
27.5°	172.0	162.5	154.1	151.9	149.1
30°	156.9	146.8	136.7	136.7	132.8
32.5°	140.7	131.1	120.5	119.9	117.7
35°	125.0	115.4	104.8	103.7	101.4
37.5°	110.4	100.9	90.8	87.4	84.6
40°	94.1	85.7	77.3	71.7	68.4
42.5°	81.3	71.7	63.3	56.6	52.1
45°	65.0	58.3	51.6	43.1	37.5
47.5°	50.4	46.0	40.3	30.8	28.0
50°	37.0	34.7	30.3	23.0	22.4
52.5°	23.5	24.7	21.9	17.9	19.6
55°	11.2	15.7	14.6	15.1	16.3
57.5°	7.3	7.8	10.6	12.3	13.4
60°	5.6	5.6	7.8	10.1	11.2
62.5°	4.5	4.5	6.2	8.4	9.0
65°	3.4	3.9	4.5	6.2	7.3
67.5°	2.8	2.8	3.4	5.0	5.6
70°	2.2	2.2	2.8	3.9	4.5
72.5°	1.7	1.7	2.2	3.4	3.4
75°	1.1	1.7	1.7	2.2	2.8
77.5°	1.1	1.1	1.1	1.7	2.2
80°	0.6	0.6	1.1	1.1	1.7
82.5°	0.6	0.6	0.6	0.6	1.1
85°	0.0	0.0	0.0	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)