

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: P1058005

Luminaire Tested: S122RDR-S485D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058005  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D935-X4F0-XX-UDD-BVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

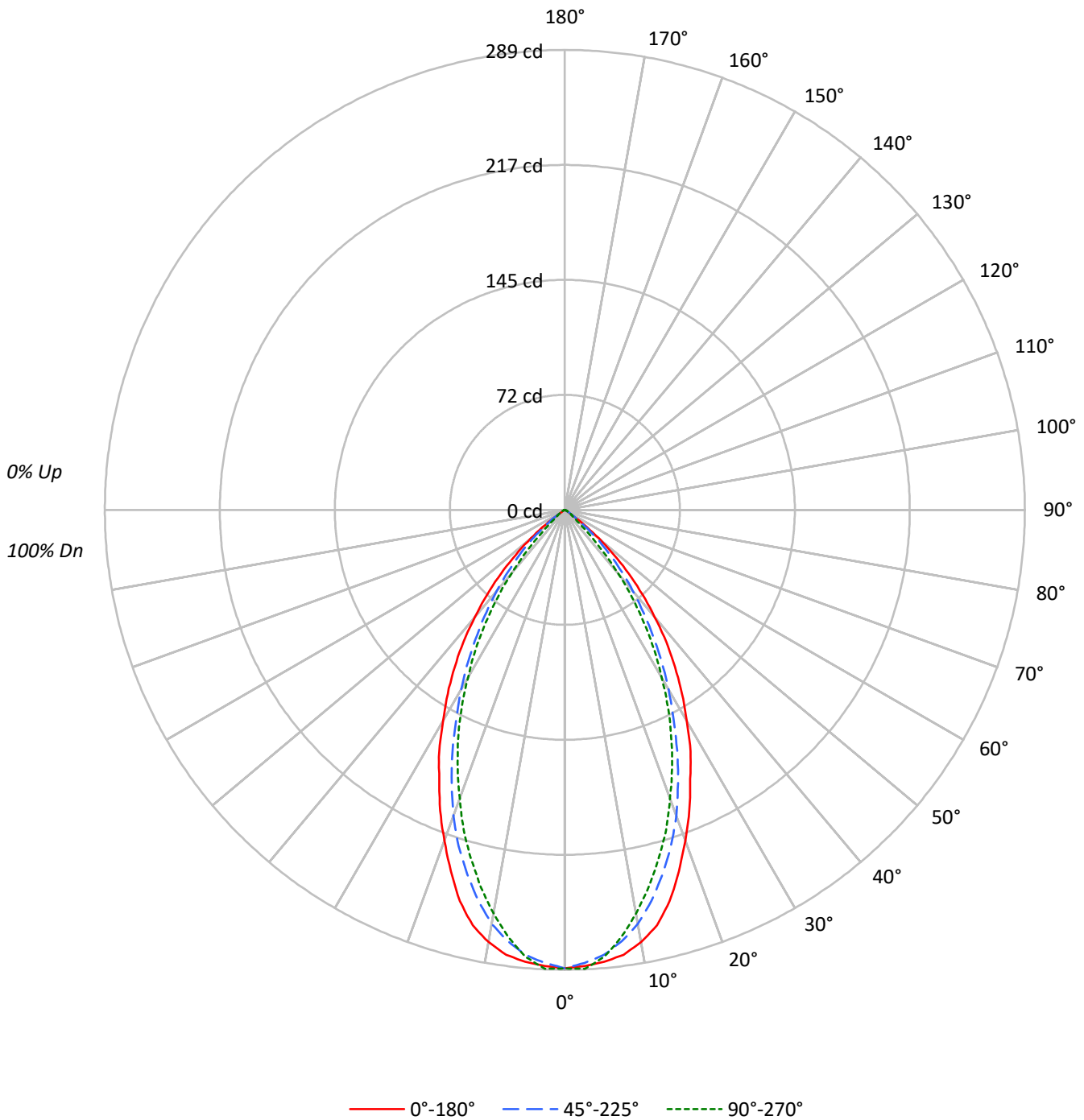
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 270.9 lumens  
Efficiency: N/A  
Efficacy: 13.8 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88  
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: P1058005

CATALOG NUMBER: S122RDR-S485D935-X4F0-XX-UDD-BVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1058005

CATALOG NUMBER: S122RDR-S485D935-X4F0-XX-UDD-BVL-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	100	100	100	
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	93	93	
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86	86	86	86	
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79	79	79	79	
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73	73	73	73	
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67	
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62	62	
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58	58	58	58	
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54	54	54	54	
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51	51	51	51	
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47	47	47	47	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5316	5316	5316
5°	5279	5201	5223
10°	5170	4952	4827
15°	4864	4526	4340
20°	4342	4018	3792
25°	3795	3398	3225
30°	3258	2776	2595
35°	2717	2167	1949
40°	2113	1599	1248
45°	1477	1065	540
50°	804	560	192
55°	119	196	138
60°	22	44	89
65°	0	26	52
70°	0	0	32
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1477 cd/sqm



TEST NUMBER: P1058005

CATALOG NUMBER: S122RDR-S485D935-X4F0-XX-UDD-BVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.5	9.8
10°-20°	66.7	24.6
20°-30°	77.8	28.7
30°-40°	62.3	23.0
40°-50°	31.0	11.4
50°-60°	6.1	2.3
60°-70°	0.5	0.2
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	170.9	63.1
0°-40°	233.3	86.1
0°-60°	270.3	99.8
0°-90°	270.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	270.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	288	288	288	288	288	
5°	285	285	281	281	282	27
15°	255	250	237	231	227	71
25°	186	177	167	163	158	86
35°	121	108	96	92	86	75
45°	57	50	41	27	21	44
55°	4	7	6	4	4	7
65°	0	0	1	1	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1058005

CATALOG NUMBER: S122RDR-S485D935-X4F0-XX-UDD-BVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	288.1	288.1	288.1	288.1	288.1
2.5°	286.9	288.1	285.0	288.1	288.7
5°	285.0	285.0	280.8	281.4	282.0
7.5°	282.0	280.8	273.5	272.3	271.0
10°	275.9	273.5	264.3	259.5	257.6
12.5°	267.4	263.7	251.5	246.1	243.0
15°	254.6	249.7	236.9	230.8	227.2
17.5°	238.1	233.9	221.7	215.0	211.3
20°	221.1	215.0	204.6	197.9	193.1
22.5°	204.6	196.7	185.8	180.9	176.0
25°	186.4	177.2	166.9	163.2	158.4
27.5°	171.1	159.6	147.4	145.0	140.7
30°	152.9	141.9	130.3	126.7	121.8
32.5°	137.0	124.9	113.3	109.0	104.8
35°	120.6	108.4	96.2	92.0	86.5
37.5°	104.8	93.2	81.0	74.3	69.4
40°	87.7	78.0	66.4	57.9	51.8
42.5°	72.5	64.0	53.0	42.0	35.9
45°	56.6	49.9	40.8	27.4	20.7
47.5°	42.0	37.2	29.8	15.8	11.0
50°	28.0	26.2	19.5	7.9	6.7
52.5°	15.2	16.4	11.6	4.9	5.5
55°	3.7	7.3	6.1	3.7	4.3
57.5°	0.6	1.2	3.0	3.0	3.0
60°	0.6	0.6	1.2	1.8	2.4
62.5°	0.6	0.0	0.6	1.2	1.8
65°	0.0	0.0	0.6	0.6	1.2
67.5°	0.0	0.0	0.0	0.6	0.6
70°	0.0	0.0	0.0	0.6	0.6
72.5°	0.0	0.0	0.0	0.0	0.6
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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)