

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: P1058028

Luminaire Tested: S122RDR-S485D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058028
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D950-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

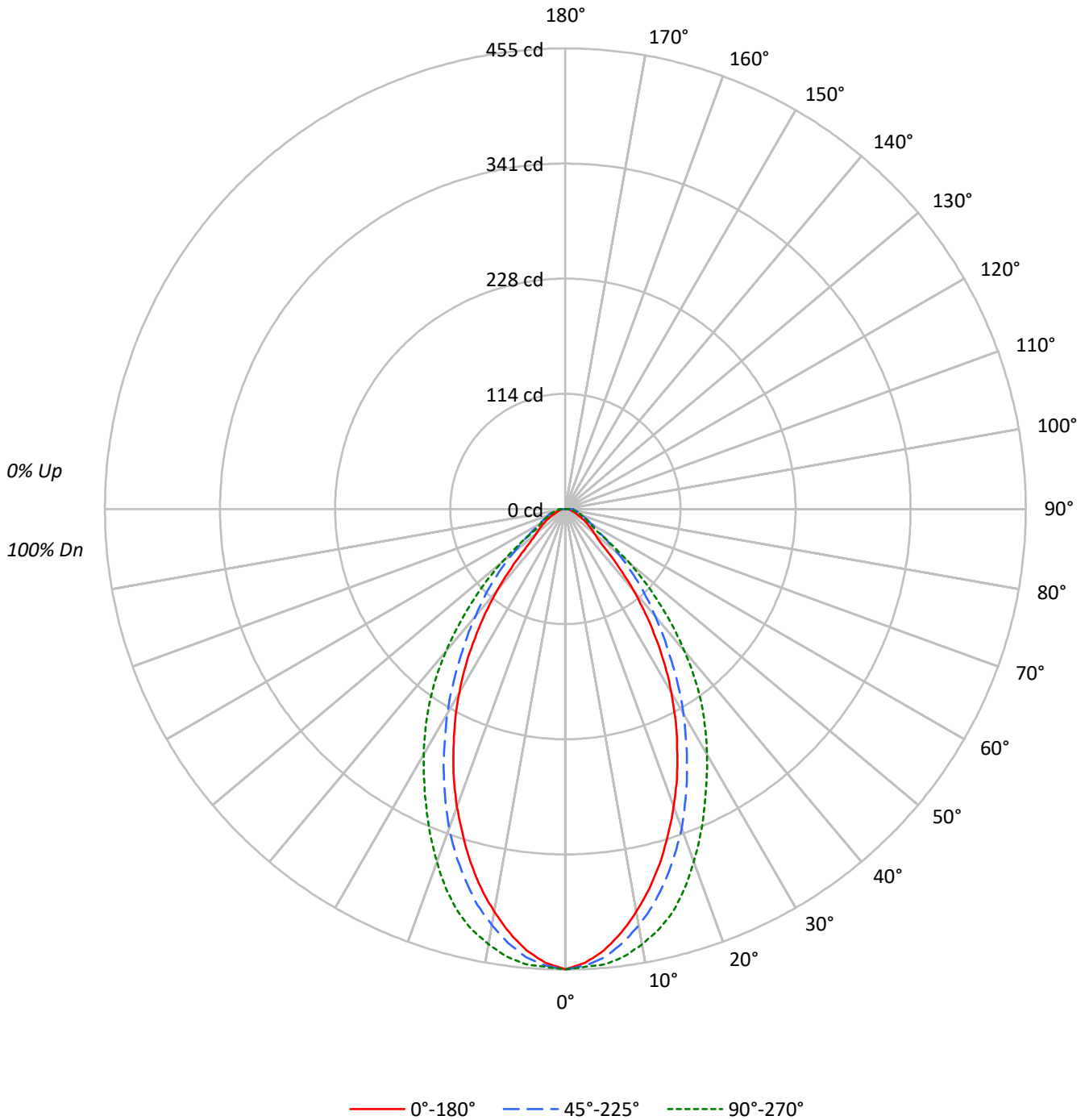
Lumens per Lamp: N/A
Luminaire Lumens: 551.7 lumens
Efficiency: N/A
Efficacy: 28.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1058028

CATALOG NUMBER: S122RDR-S485D950-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1058028

CATALOG NUMBER: S122RDR-S485D950-X4F0-XX-UDD-SVL-W

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
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8392	8392	8392
5°	8111	8237	8363
10°	7572	7826	8181
15°	6908	7269	7863
20°	6144	6596	7285
25°	5324	5792	6619
30°	4464	4969	5962
35°	3516	4111	5282
40°	2508	3322	4413
45°	1482	2628	3421
50°	1068	1900	2328
55°	891	1370	1174
60°	723	1096	996
65°	589	974	917
70°	513	950	874
75°	485	962	870
80°	499	1148	935
85°	720	1863	1143

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3421 cd/sqm



TEST NUMBER: P1058028

CATALOG NUMBER: S122RDR-S485D950-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	7.6
10°-20°	107.2	19.4
20°-30°	132.2	24.0
30°-40°	117.6	21.3
40°-50°	75.1	13.6
50°-60°	36.0	6.5
60°-70°	21.2	3.8
70°-80°	13.5	2.4
80°-90°	7.2	1.3
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°	281.1	51.0
0°-40°	398.7	72.3
0°-60°	509.8	92.4
0°-90°	551.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	551.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	455	455	455	455	455	
5°	438	446	445	447	452	41
15°	362	370	380	398	412	101
25°	262	272	284	305	325	120
35°	156	168	182	210	234	97
45°	57	74	101	117	131	48
55°	28	36	43	41	36	25
65°	14	24	22	20	21	14
75°	7	15	14	13	12	7
85°	3	8	9	7	5	3
90°	0	0	0	0	0	



TEST NUMBER: P1058028

CATALOG NUMBER: S122RDR-S485D950-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	454.8	454.8	454.8	454.8	454.8
2.5°	448.8	456.2	451.5	451.5	452.8
5°	437.9	446.0	444.7	447.4	451.5
7.5°	422.4	431.2	432.5	440.0	446.0
10°	404.1	413.6	417.7	428.5	436.6
12.5°	383.9	393.3	400.8	414.3	425.8
15°	361.6	370.4	380.5	398.1	411.6
17.5°	337.2	348.7	358.9	377.1	392.7
20°	312.9	323.7	335.9	353.5	371.0
22.5°	287.9	298.0	310.2	328.5	348.7
25°	261.5	271.7	284.5	304.8	325.1
27.5°	235.9	246.0	258.2	280.5	302.1
30°	209.5	219.6	233.2	256.1	279.8
32.5°	183.2	194.0	207.5	232.5	257.5
35°	156.1	168.3	182.5	210.2	234.5
37.5°	129.8	141.9	159.5	186.5	209.5
40°	104.1	118.3	137.9	162.2	183.2
42.5°	79.1	94.6	118.9	138.5	156.8
45°	56.8	73.7	100.7	116.9	131.1
47.5°	43.3	55.4	83.1	96.0	106.1
50°	37.2	44.6	66.2	75.7	81.1
52.5°	32.4	39.2	52.7	57.4	57.4
55°	27.7	35.8	42.6	41.2	36.5
57.5°	23.7	32.4	35.1	29.7	31.1
60°	19.6	29.7	29.7	26.4	27.0
62.5°	16.2	27.7	25.7	23.0	23.7
65°	13.5	24.3	22.3	20.3	21.0
67.5°	10.8	21.6	19.6	18.2	18.2
70°	9.5	19.6	17.6	16.2	16.2
72.5°	8.1	16.9	15.5	14.2	14.2
75°	6.8	14.9	13.5	12.8	12.2
77.5°	6.1	12.8	12.2	10.8	10.1
80°	4.7	10.8	10.8	10.1	8.8
82.5°	4.1	9.5	9.5	8.8	7.4
85°	3.4	8.1	8.8	7.4	5.4
87.5°	2.7	7.4	7.4	6.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)