

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: P1057892

Luminaire Tested: S122RDR-S290D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057892
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D840-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

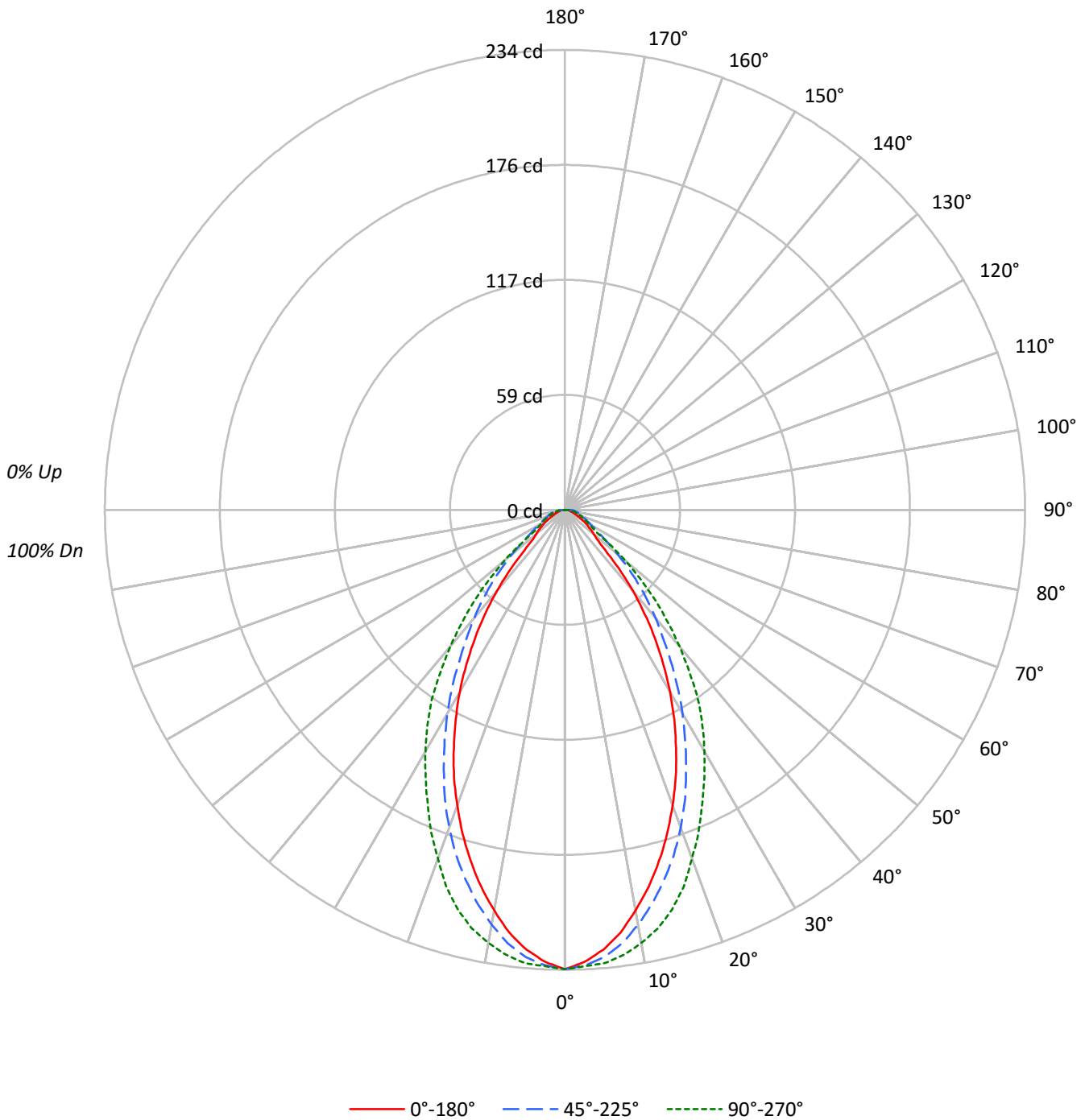
Lumens per Lamp: N/A
Luminaire Lumens: 281.9 lumens
Efficiency: N/A
Efficacy: 22.6 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1057892

CATALOG NUMBER: S122RDR-S290D840-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1057892

CATALOG NUMBER: S122RDR-S290D840-X4F0-XX-UDD-SVL-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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4312	4312	4312
5°	4160	4232	4288
10°	3877	4015	4193
15°	3534	3723	4019
20°	3142	3378	3707
25°	2722	2966	3361
30°	2278	2544	3021
35°	1798	2108	2660
40°	1289	1725	2180
45°	754	1362	1688
50°	545	990	1140
55°	457	708	595
60°	365	572	509
65°	301	506	472
70°	254	491	442
75°	242	520	428
80°	276	638	457
85°	466	995	635

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1688 cd/sqm



TEST NUMBER: P1057892

CATALOG NUMBER: S122RDR-S290D840-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.4	7.6
10°-20°	54.9	19.5
20°-30°	67.4	23.9
30°-40°	59.6	21.1
40°-50°	38.1	13.5
50°-60°	18.6	6.6
60°-70°	11.1	3.9
70°-80°	7.1	2.5
80°-90°	3.9	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°	143.7	51.0
0°-40°	203.3	72.1
0°-60°	259.9	92.2
0°-90°	281.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	281.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	234	234	234	234	234	
5°	225	229	228	229	232	21
15°	185	190	195	204	210	52
25°	134	138	146	155	165	61
35°	80	84	94	106	118	50
45°	29	37	52	59	65	24
55°	14	19	22	21	18	13
65°	7	13	12	11	11	7
75°	3	8	7	6	6	4
85°	2	4	5	4	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1057892

CATALOG NUMBER: S122RDR-S290D840-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	233.7	233.7	233.7	233.7	233.7
2.5°	230.2	234.5	232.0	232.0	232.4
5°	224.6	229.4	228.5	229.4	231.5
7.5°	216.9	221.6	222.5	225.9	228.5
10°	206.9	211.7	214.3	219.9	223.8
12.5°	196.6	201.3	205.2	212.6	218.2
15°	185.0	190.1	194.9	203.5	210.4
17.5°	172.9	178.1	184.1	192.7	200.9
20°	160.0	164.7	172.0	180.2	188.8
22.5°	147.4	151.8	159.5	167.3	177.6
25°	133.7	138.4	145.7	154.8	165.1
27.5°	120.3	125.0	132.4	142.7	153.5
30°	106.9	111.2	119.4	130.2	141.8
32.5°	93.1	97.4	106.5	118.1	130.2
35°	79.8	84.1	93.6	106.5	118.1
37.5°	66.4	71.1	81.9	94.0	103.9
40°	53.5	59.1	71.6	81.9	90.5
42.5°	40.5	48.3	61.7	70.3	77.2
45°	28.9	37.1	52.2	58.6	64.7
47.5°	22.0	28.5	43.1	47.9	51.7
50°	19.0	23.3	34.5	37.9	39.7
52.5°	16.4	20.7	27.6	28.9	28.0
55°	14.2	19.0	22.0	20.7	18.5
57.5°	12.1	17.7	18.1	15.5	16.0
60°	9.9	16.0	15.5	13.4	13.8
62.5°	8.2	14.7	13.4	12.1	12.1
65°	6.9	12.9	11.6	10.8	10.8
67.5°	5.6	11.6	10.3	9.5	9.5
70°	4.7	10.3	9.1	8.2	8.2
72.5°	4.3	9.1	8.2	7.3	7.3
75°	3.4	7.8	7.3	6.5	6.0
77.5°	3.0	6.5	6.5	6.0	5.2
80°	2.6	5.6	6.0	5.2	4.3
82.5°	2.6	5.2	5.2	4.7	3.4
85°	2.2	4.3	4.7	4.3	3.0
87.5°	1.3	3.9	3.9	3.4	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)