

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: P1057937

Luminaire Tested: S122RDR-S290D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057937
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-S290D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

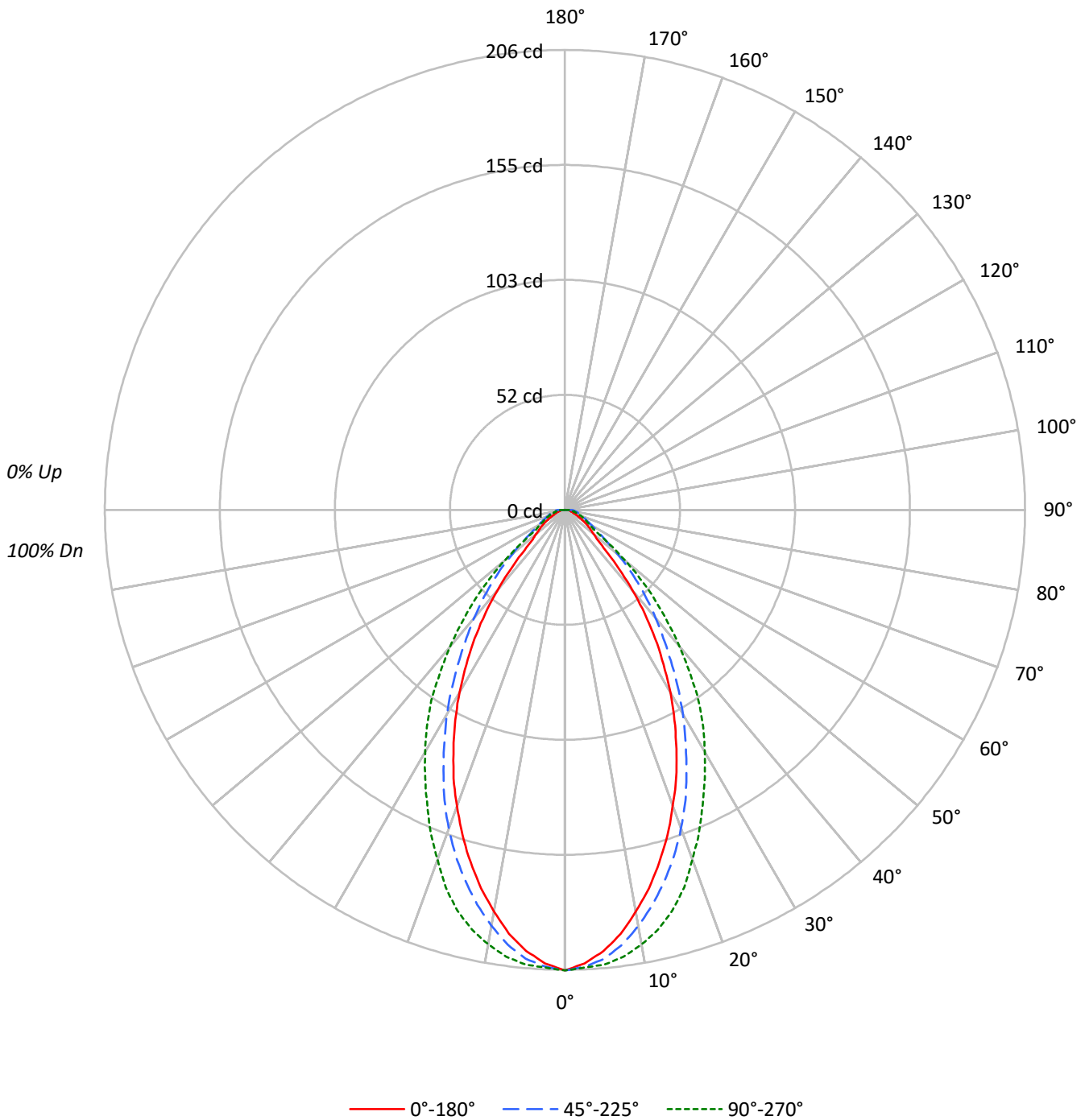
Lumens per Lamp: N/A
Luminaire Lumens: 248.9 lumens
Efficiency: N/A
Efficacy: 19.9 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1057937

CATALOG NUMBER: S122RDR-S290D940-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1057937

CATALOG NUMBER: S122RDR-S290D940-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°	3807	3807	3807
5°	3673	3738	3786
10°	3423	3545	3702
15°	3120	3288	3549
20°	2773	2983	3273
25°	2402	2620	2968
30°	2011	2248	2668
35°	1586	1861	2349
40°	1137	1522	1925
45°	665	1203	1490
50°	482	876	1005
55°	405	624	528
60°	325	506	450
65°	266	450	415
70°	227	432	388
75°	214	463	378
80°	244	563	404
85°	402	889	572

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1490 cd/sqm



TEST NUMBER: P1057937

CATALOG NUMBER: S122RDR-S290D940-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.9	7.6
10°-20°	48.4	19.5
20°-30°	59.5	23.9
30°-40°	52.6	21.1
40°-50°	33.6	13.5
50°-60°	16.4	6.6
60°-70°	9.8	3.9
70°-80°	6.2	2.5
80°-90°	3.4	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°	126.9	51.0
0°-40°	179.5	72.1
0°-60°	229.5	92.2
0°-90°	248.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	248.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	206	206	206	206	206	
5°	198	202	202	202	204	18
15°	163	168	172	180	186	46
25°	118	122	129	137	146	54
35°	70	74	83	94	104	44
45°	26	33	46	52	57	21
55°	13	17	19	18	16	11
65°	6	11	10	10	10	6
75°	3	7	6	6	5	3
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1057937

CATALOG NUMBER: S122RDR-S290D940-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	206.3	206.3	206.3	206.3	206.3
2.5°	203.3	207.1	204.8	204.8	205.2
5°	198.3	202.5	201.8	202.5	204.4
7.5°	191.5	195.7	196.4	199.5	201.8
10°	182.7	186.9	189.2	194.2	197.6
12.5°	173.6	177.8	181.2	187.7	192.6
15°	163.3	167.9	172.1	179.7	185.8
17.5°	152.7	157.2	162.6	170.2	177.4
20°	141.2	145.4	151.9	159.1	166.7
22.5°	130.2	134.0	140.9	147.7	156.8
25°	118.0	122.2	128.7	136.7	145.8
27.5°	106.2	110.4	116.9	126.0	135.5
30°	94.4	98.2	105.5	115.0	125.2
32.5°	82.2	86.0	94.0	104.3	115.0
35°	70.4	74.2	82.6	94.0	104.3
37.5°	58.6	62.8	72.3	83.0	91.7
40°	47.2	52.2	63.2	72.3	79.9
42.5°	35.8	42.6	54.4	62.1	68.1
45°	25.5	32.7	46.1	51.8	57.1
47.5°	19.4	25.1	38.1	42.3	45.7
50°	16.8	20.6	30.5	33.5	35.0
52.5°	14.5	18.3	24.4	25.5	24.7
55°	12.6	16.8	19.4	18.3	16.4
57.5°	10.7	15.6	16.0	13.7	14.1
60°	8.8	14.1	13.7	11.8	12.2
62.5°	7.2	12.9	11.8	10.7	10.7
65°	6.1	11.4	10.3	9.5	9.5
67.5°	4.9	10.3	9.1	8.4	8.4
70°	4.2	9.1	8.0	7.2	7.2
72.5°	3.8	8.0	7.2	6.5	6.5
75°	3.0	6.9	6.5	5.7	5.3
77.5°	2.7	5.7	5.7	5.3	4.6
80°	2.3	4.9	5.3	4.6	3.8
82.5°	2.3	4.6	4.6	4.2	3.0
85°	1.9	3.8	4.2	3.8	2.7
87.5°	1.1	3.4	3.4	3.0	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)