

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: P1057938

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057938
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-S290D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

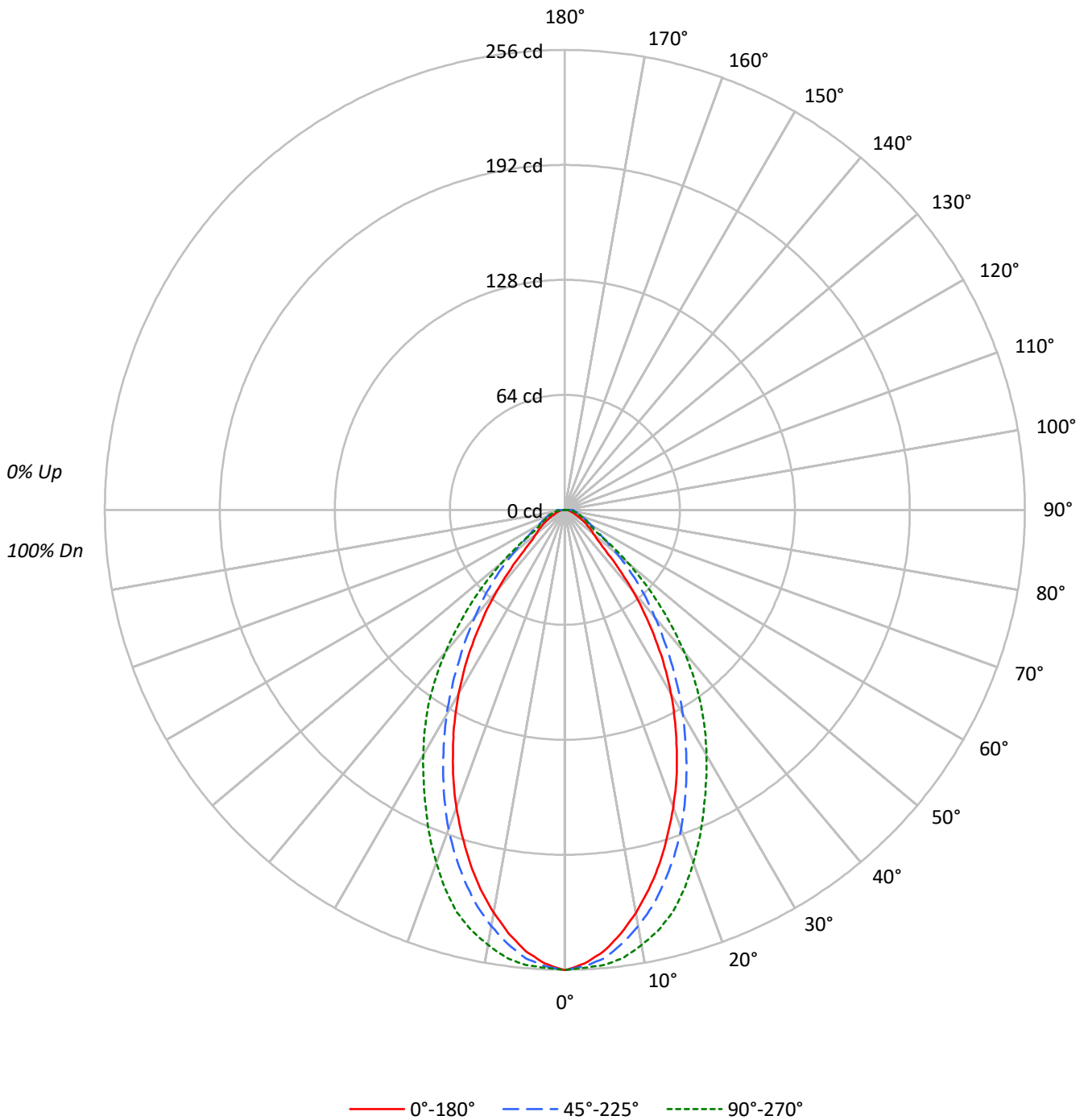
Lumens per Lamp: N/A
Luminaire Lumens: 310.8 lumens
Efficiency: N/A
Efficacy: 24.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1057938

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

Luminous Intensity Polar Plot





TEST NUMBER: P1057938

CATALOG NUMBER: S122RDR-S290D940-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				
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	4728	4728	4728
5°	4570	4640	4710
10°	4266	4409	4609
15°	3891	4096	4430
20°	3462	3715	4104
25°	2999	3264	3728
30°	2514	2800	3358
35°	1982	2316	2976
40°	1412	1872	2486
45°	835	1480	1928
50°	600	1071	1312
55°	502	772	663
60°	406	620	561
65°	332	550	515
70°	286	534	491
75°	271	542	492
80°	287	648	521
85°	402	1037	635

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1928 cd/sqm



TEST NUMBER: P1057938

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	7.6
10°-20°	60.4	19.4
20°-30°	74.5	24.0
30°-40°	66.3	21.3
40°-50°	42.3	13.6
50°-60°	20.3	6.5
60°-70°	11.9	3.8
70°-80°	7.6	2.4
80°-90°	4.0	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°	158.4	51.0
0°-40°	224.6	72.3
0°-60°	287.2	92.4
0°-90°	310.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	310.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	256	256	256	256	256	
5°	247	251	250	252	254	23
15°	204	209	214	224	232	57
25°	147	153	160	172	183	67
35°	88	95	103	118	132	55
45°	32	42	57	66	74	27
55°	16	20	24	23	21	14
65°	8	14	13	11	12	8
75°	4	8	8	7	7	4
85°	2	5	5	4	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1057938

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	256.2	256.2	256.2	256.2	256.2
2.5°	252.8	257.0	254.3	254.3	255.1
5°	246.7	251.3	250.5	252.1	254.3
7.5°	238.0	242.9	243.7	247.9	251.3
10°	227.7	233.0	235.3	241.4	246.0
12.5°	216.3	221.6	225.8	233.4	239.9
15°	203.7	208.7	214.4	224.3	231.9
17.5°	190.0	196.5	202.2	212.5	221.2
20°	176.3	182.4	189.2	199.1	209.0
22.5°	162.2	167.9	174.8	185.0	196.5
25°	147.3	153.1	160.3	171.7	183.1
27.5°	132.9	138.6	145.4	158.0	170.2
30°	118.0	123.7	131.4	144.3	157.6
32.5°	103.2	109.3	116.9	131.0	145.1
35°	88.0	94.8	102.8	118.4	132.1
37.5°	73.1	80.0	89.9	105.1	118.0
40°	58.6	66.6	77.7	91.4	103.2
42.5°	44.5	53.3	67.0	78.1	88.3
45°	32.0	41.5	56.7	65.9	73.9
47.5°	24.4	31.2	46.8	54.1	59.8
50°	20.9	25.1	37.3	42.6	45.7
52.5°	18.3	22.1	29.7	32.4	32.4
55°	15.6	20.2	24.0	23.2	20.6
57.5°	13.3	18.3	19.8	16.8	17.5
60°	11.0	16.8	16.8	14.8	15.2
62.5°	9.1	15.6	14.5	12.9	13.3
65°	7.6	13.7	12.6	11.4	11.8
67.5°	6.1	12.2	11.0	10.3	10.3
70°	5.3	11.0	9.9	9.1	9.1
72.5°	4.6	9.5	8.8	8.0	8.0
75°	3.8	8.4	7.6	7.2	6.9
77.5°	3.4	7.2	6.9	6.1	5.7
80°	2.7	6.1	6.1	5.7	4.9
82.5°	2.3	5.3	5.3	4.9	4.2
85°	1.9	4.6	4.9	4.2	3.0
87.5°	1.5	4.2	4.2	3.4	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)