

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: P1057944

Luminaire Tested: S122RDR-S290D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057944
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

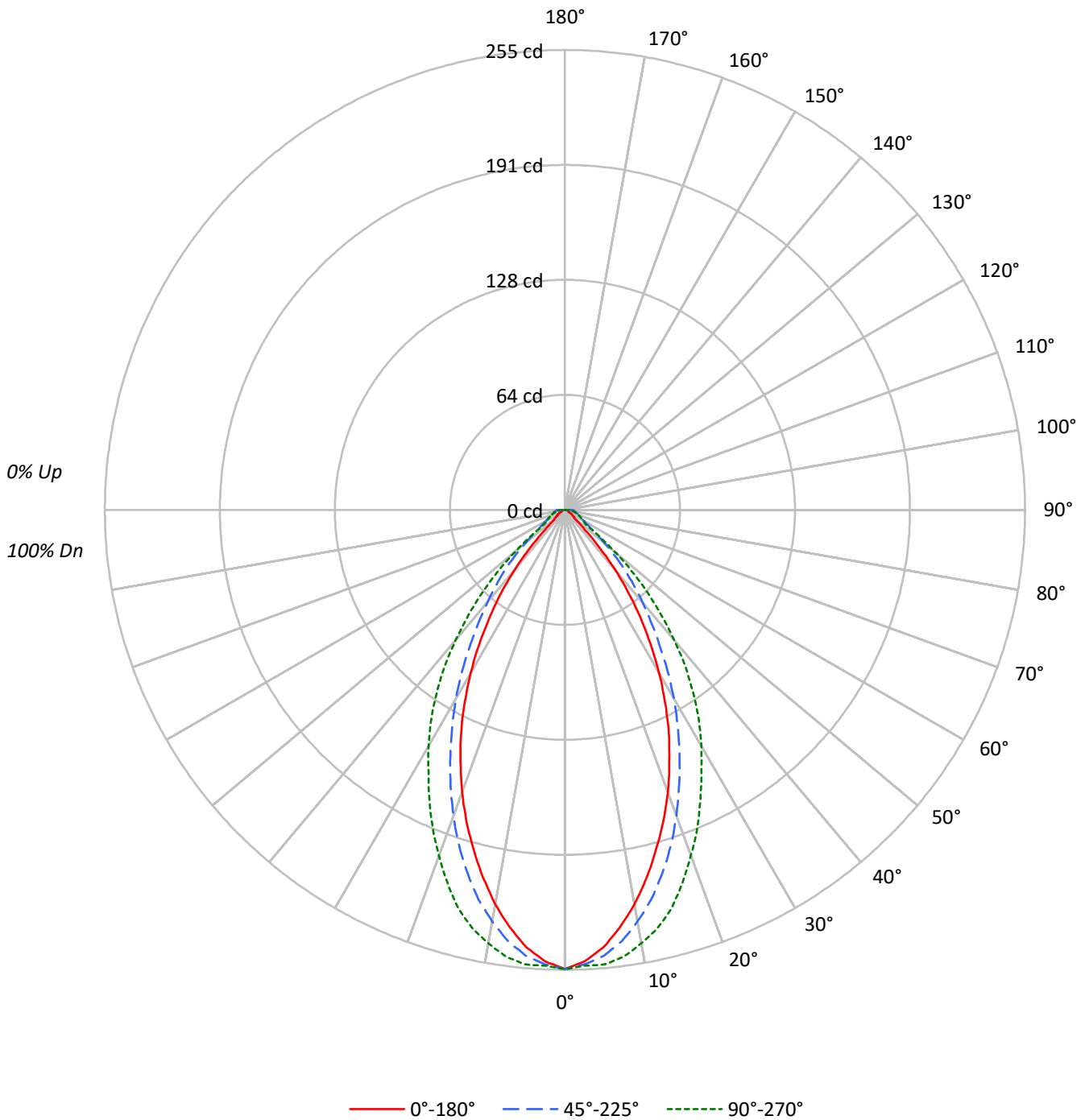
Lumens per Lamp: N/A
Luminaire Lumens: 277.2 lumens
Efficiency: N/A
Efficacy: 22.2 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1057944

CATALOG NUMBER: S122RDR-S290D950-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56																												
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45																												
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4698	4698	4698
5°	4512	4596	4686
10°	4162	4343	4574
15°	3729	3985	4367
20°	3271	3544	4008
25°	2771	3060	3616
30°	2222	2570	3222
35°	1642	2057	2791
40°	1031	1609	2267
45°	404	1211	1681
50°	198	818	1031
55°	158	537	460
60°	122	435	421
65°	87	410	410
70°	108	415	415
75°	114	463	435
80°	170	606	478
85°	339	1037	699

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 1904 cd/sqm



TEST NUMBER: P1057944

CATALOG NUMBER: S122RDR-S290D950-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.3	8.4
10°-20°	58.8	21.2
20°-30°	70.3	25.4
30°-40°	59.2	21.4
40°-50°	33.7	12.2
50°-60°	13.3	4.8
60°-70°	8.4	3.0
70°-80°	6.2	2.2
80°-90°	4.0	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°	152.4	55.0
0°-40°	211.6	76.4
0°-60°	258.6	93.3
0°-90°	277.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	277.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	255	255	255	255	255	
5°	244	249	248	251	253	23
15°	195	202	209	221	229	54
25°	136	142	150	166	178	62
35°	73	79	91	111	124	45
45°	16	27	46	58	64	15
55°	5	11	17	17	14	4
65°	2	9	9	9	9	2
75°	2	6	6	6	6	2
85°	2	4	5	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	254.6	254.6	254.6	254.6	254.6
2.5°	250.6	255.1	252.2	252.6	253.0
5°	243.6	248.9	248.1	251.0	253.0
7.5°	233.5	239.2	241.2	246.1	249.8
10°	222.1	228.6	231.8	239.6	244.1
12.5°	209.0	216.3	221.2	231.0	237.5
15°	195.2	202.1	208.6	220.8	228.6
17.5°	181.3	188.2	195.2	208.6	216.8
20°	166.6	173.2	180.5	194.8	204.1
22.5°	151.2	158.1	165.4	180.1	191.5
25°	136.1	142.2	150.3	165.8	177.6
27.5°	120.2	126.3	135.3	151.2	163.8
30°	104.3	110.4	120.6	136.9	151.2
32.5°	88.4	94.9	105.9	123.9	138.1
35°	72.9	79.4	91.3	110.8	123.9
37.5°	57.9	65.2	78.2	97.4	109.6
40°	42.8	51.3	66.8	83.9	94.1
42.5°	28.5	39.1	56.2	70.5	79.0
45°	15.5	27.3	46.4	58.3	64.4
47.5°	8.6	17.5	37.1	46.4	50.1
50°	6.9	12.2	28.5	35.4	35.9
52.5°	5.7	11.0	21.2	25.3	23.2
55°	4.9	10.6	16.7	17.1	14.3
57.5°	4.1	10.2	13.9	12.2	12.2
60°	3.3	10.2	11.8	11.0	11.4
62.5°	2.4	10.2	10.6	9.8	10.2
65°	2.0	9.4	9.4	9.0	9.4
67.5°	2.0	8.6	8.6	8.1	8.6
70°	2.0	8.1	7.7	7.7	7.7
72.5°	1.6	7.3	7.3	6.9	6.9
75°	1.6	6.5	6.5	6.1	6.1
77.5°	1.6	6.1	6.1	5.7	5.3
80°	1.6	5.3	5.7	5.3	4.5
82.5°	1.6	4.9	5.3	4.9	3.7
85°	1.6	4.5	4.9	4.5	3.3
87.5°	1.2	4.5	4.5	3.7	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)