

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: P1057920

Luminaire Tested: S122RDR-S290D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057920
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-S290D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

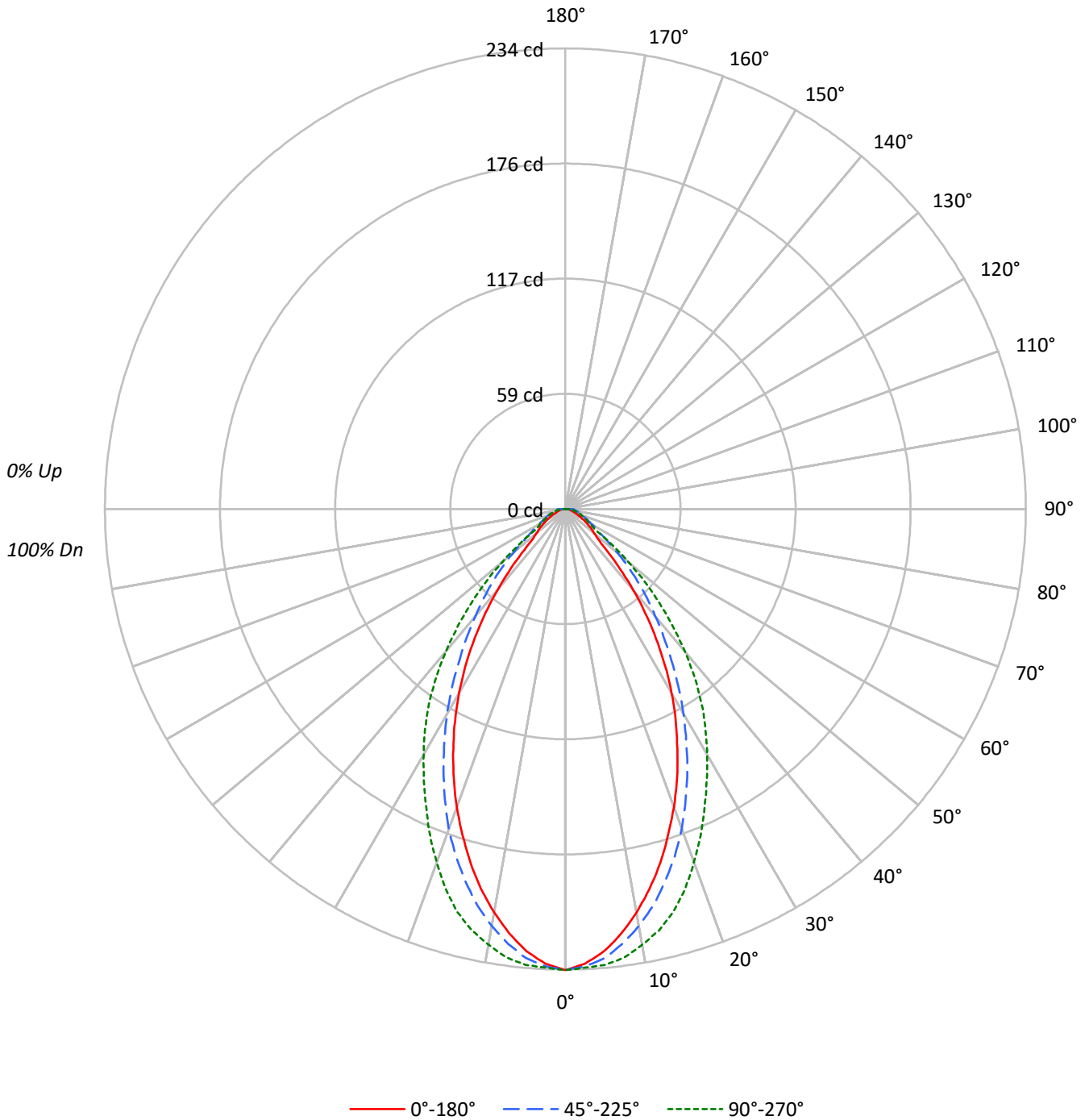
Lumens per Lamp: N/A
Luminaire Lumens: 284.2 lumens
Efficiency: N/A
Efficacy: 22.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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
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°	4323	4323	4323
5°	4179	4244	4307
10°	3901	4030	4214
15°	3557	3744	4050
20°	3165	3397	3753
25°	2742	2985	3408
30°	2299	2559	3070
35°	1811	2117	2721
40°	1291	1710	2271
45°	762	1354	1761
50°	548	979	1200
55°	460	705	605
60°	373	565	513
65°	306	502	472
70°	264	491	453
75°	250	499	449
80°	255	595	478
85°	360	953	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1761 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.5	7.6
10°-20°	55.2	19.4
20°-30°	68.1	24.0
30°-40°	60.6	21.3
40°-50°	38.7	13.6
50°-60°	18.6	6.5
60°-70°	10.9	3.8
70°-80°	7.0	2.5
80°-90°	3.7	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°	144.8	51.0
0°-40°	205.4	72.3
0°-60°	262.6	92.4
0°-90°	284.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	284.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	234	234	234	234	234	
5°	226	230	229	230	232	21
15°	186	191	196	205	212	52
25°	135	140	147	157	167	62
35°	80	87	94	108	121	50
45°	29	38	52	60	68	25
55°	14	18	22	21	19	13
65°	7	12	12	10	11	7
75°	4	8	7	7	6	4
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	234.3	234.3	234.3	234.3	234.3
2.5°	231.2	235.0	232.5	232.5	233.2
5°	225.6	229.8	229.1	230.5	232.5
7.5°	217.6	222.1	222.8	226.6	229.8
10°	208.2	213.1	215.1	220.7	224.9
12.5°	197.7	202.6	206.4	213.4	219.3
15°	186.2	190.8	196.0	205.0	212.0
17.5°	173.7	179.6	184.9	194.3	202.3
20°	161.2	166.8	173.0	182.1	191.1
22.5°	148.3	153.5	159.8	169.2	179.6
25°	134.7	139.9	146.6	157.0	167.4
27.5°	121.5	126.7	133.0	144.5	155.6
30°	107.9	113.1	120.1	131.9	144.1
32.5°	94.3	99.9	106.9	119.8	132.6
35°	80.4	86.7	94.0	108.3	120.8
37.5°	66.8	73.1	82.2	96.1	107.9
40°	53.6	60.9	71.0	83.5	94.3
42.5°	40.7	48.7	61.3	71.4	80.8
45°	29.2	37.9	51.9	60.2	67.5
47.5°	22.3	28.5	42.8	49.4	54.7
50°	19.1	23.0	34.1	39.0	41.8
52.5°	16.7	20.2	27.2	29.6	29.6
55°	14.3	18.5	21.9	21.2	18.8
57.5°	12.2	16.7	18.1	15.3	16.0
60°	10.1	15.3	15.3	13.6	13.9
62.5°	8.4	14.3	13.2	11.8	12.2
65°	7.0	12.5	11.5	10.4	10.8
67.5°	5.6	11.1	10.1	9.4	9.4
70°	4.9	10.1	9.1	8.4	8.4
72.5°	4.2	8.7	8.0	7.3	7.3
75°	3.5	7.7	7.0	6.6	6.3
77.5°	3.1	6.6	6.3	5.6	5.2
80°	2.4	5.6	5.6	5.2	4.5
82.5°	2.1	4.9	4.9	4.5	3.8
85°	1.7	4.2	4.5	3.8	2.8
87.5°	1.4	3.8	3.8	3.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)