

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: P1057875

Luminaire Tested: S122RDR-S290D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057875
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-S290D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

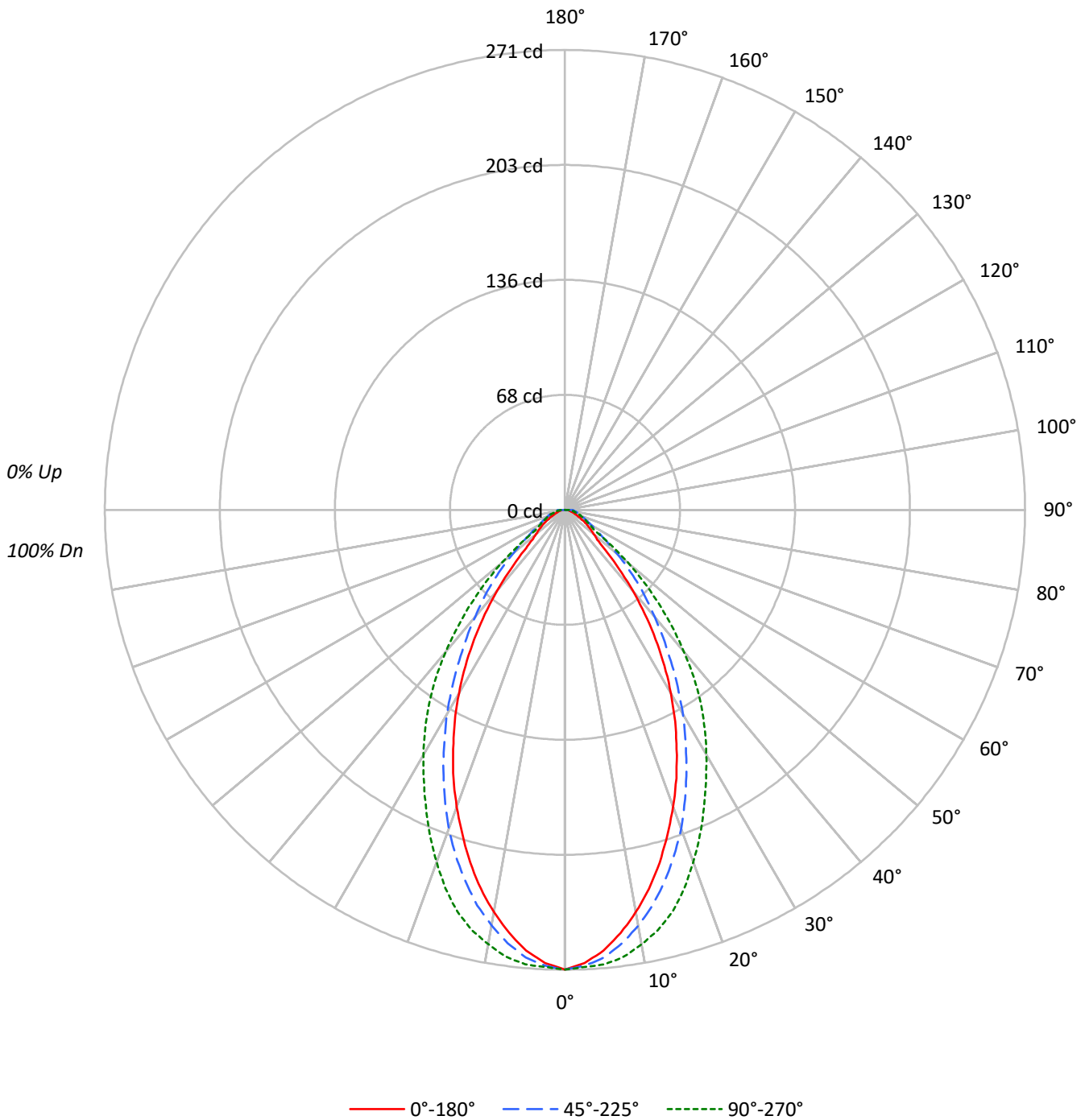
Lumens per Lamp: N/A
Luminaire Lumens: 328.5 lumens
Efficiency: N/A
Efficacy: 26.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1057875

CATALOG NUMBER: S122RDR-S290D830-X4F0-XX-UDD-SVL-W

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	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	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°	4999	4999	4999
5°	4831	4905	4979
10°	4510	4660	4872
15°	4113	4329	4682
20°	3658	3927	4338
25°	3170	3449	3942
30°	2659	2957	3550
35°	2095	2449	3147
40°	1493	1978	2628
45°	882	1566	2038
50°	634	1131	1387
55°	531	817	698
60°	432	653	594
65°	349	581	546
70°	302	566	523
75°	285	570	513
80°	298	680	553
85°	423	1101	677

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2038 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.8	7.6
10°-20°	63.8	19.4
20°-30°	78.7	24.0
30°-40°	70.0	21.3
40°-50°	44.7	13.6
50°-60°	21.5	6.5
60°-70°	12.6	3.8
70°-80°	8.0	2.4
80°-90°	4.3	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°	167.4	51.0
0°-40°	237.4	72.3
0°-60°	303.6	92.4
0°-90°	328.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	328.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	271	271	271	271	271	
5°	261	266	265	266	269	24
15°	215	220	227	237	245	60
25°	156	162	169	182	194	71
35°	93	100	109	125	140	58
45°	34	44	60	70	78	28
55°	16	21	25	24	22	15
65°	8	14	13	12	12	8
75°	4	9	8	8	7	4
85°	2	5	5	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	270.9	270.9	270.9	270.9	270.9
2.5°	267.2	271.7	268.8	268.8	269.6
5°	260.8	265.6	264.8	266.4	268.8
7.5°	251.5	256.8	257.6	262.0	265.6
10°	240.7	246.3	248.7	255.2	260.0
12.5°	228.6	234.2	238.7	246.7	253.5
15°	215.3	220.5	226.6	237.0	245.1
17.5°	200.8	207.7	213.7	224.6	233.8
20°	186.3	192.8	200.0	210.5	220.9
22.5°	171.4	177.5	184.7	195.6	207.7
25°	155.7	161.8	169.4	181.5	193.6
27.5°	140.5	146.5	153.7	167.0	179.9
30°	124.8	130.8	138.8	152.5	166.6
32.5°	109.1	115.5	123.6	138.4	153.3
35°	93.0	100.2	108.7	125.2	139.7
37.5°	77.3	84.5	95.0	111.1	124.8
40°	62.0	70.4	82.1	96.6	109.1
42.5°	47.1	56.3	70.8	82.5	93.4
45°	33.8	43.9	60.0	69.6	78.1
47.5°	25.8	33.0	49.5	57.1	63.2
50°	22.1	26.6	39.4	45.1	48.3
52.5°	19.3	23.3	31.4	34.2	34.2
55°	16.5	21.3	25.4	24.5	21.7
57.5°	14.1	19.3	20.9	17.7	18.5
60°	11.7	17.7	17.7	15.7	16.1
62.5°	9.7	16.5	15.3	13.7	14.1
65°	8.0	14.5	13.3	12.1	12.5
67.5°	6.4	12.9	11.7	10.9	10.9
70°	5.6	11.7	10.5	9.7	9.7
72.5°	4.8	10.1	9.3	8.5	8.5
75°	4.0	8.9	8.0	7.6	7.2
77.5°	3.6	7.6	7.2	6.4	6.0
80°	2.8	6.4	6.4	6.0	5.2
82.5°	2.4	5.6	5.6	5.2	4.4
85°	2.0	4.8	5.2	4.4	3.2
87.5°	1.6	4.4	4.4	3.6	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)