

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: P1057883

Luminaire Tested: S122RDR-S290D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057883
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-S290D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

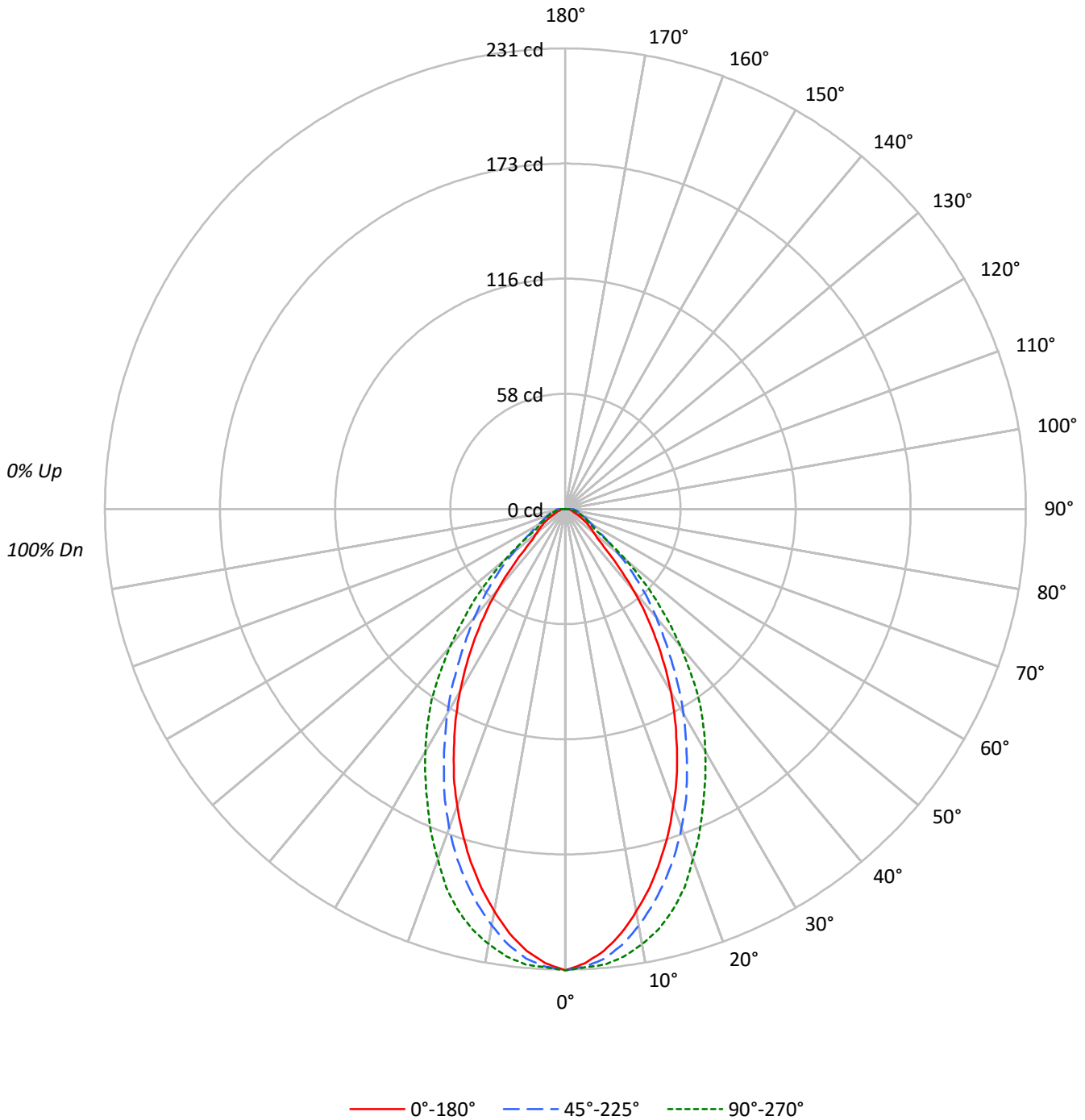
Lumens per Lamp: N/A
Luminaire Lumens: 279.2 lumens
Efficiency: N/A
Efficacy: 22.3 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	4270	4270	4270
5°	4120	4192	4247
10°	3839	3976	4152
15°	3500	3687	3979
20°	3110	3344	3672
25°	2694	2938	3329
30°	2256	2521	2994
35°	1780	2086	2636
40°	1274	1708	2161
45°	746	1349	1670
50°	540	982	1128
55°	454	701	592
60°	362	568	506
65°	297	502	467
70°	254	486	437
75°	242	520	428
80°	276	638	457
85°	445	995	635

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1670 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.2	7.6
10°-20°	54.3	19.5
20°-30°	66.8	23.9
30°-40°	59.0	21.1
40°-50°	37.7	13.5
50°-60°	18.4	6.6
60°-70°	10.9	3.9
70°-80°	7.0	2.5
80°-90°	3.8	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°	142.3	51.0
0°-40°	201.3	72.1
0°-60°	257.4	92.2
0°-90°	279.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	279.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	231	231	231	231	231	
5°	222	227	226	227	229	21
15°	183	188	193	202	208	51
25°	132	137	144	153	164	61
35°	79	83	93	106	117	49
45°	29	37	52	58	64	24
55°	14	19	22	20	18	13
65°	7	13	12	11	11	7
75°	3	8	7	6	6	4
85°	2	4	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°	231.4	231.4	231.4	231.4	231.4
2.5°	228.0	232.2	229.7	229.7	230.1
5°	222.4	227.1	226.3	227.1	229.3
7.5°	214.7	219.4	220.3	223.7	226.3
10°	204.9	209.6	212.2	217.7	221.6
12.5°	194.7	199.4	203.2	210.5	216.0
15°	183.2	188.3	193.0	201.5	208.3
17.5°	171.2	176.3	182.3	190.8	198.9
20°	158.4	163.1	170.3	178.5	187.0
22.5°	146.0	150.3	158.0	165.6	175.9
25°	132.3	137.0	144.3	153.3	163.5
27.5°	119.1	123.8	131.1	141.3	152.0
30°	105.9	110.1	118.3	128.9	140.5
32.5°	92.2	96.5	105.5	117.0	128.9
35°	79.0	83.3	92.6	105.5	117.0
37.5°	65.7	70.4	81.1	93.1	102.9
40°	52.9	58.5	70.9	81.1	89.7
42.5°	40.1	47.8	61.1	69.6	76.4
45°	28.6	36.7	51.7	58.1	64.0
47.5°	21.8	28.2	42.7	47.4	51.2
50°	18.8	23.1	34.2	37.6	39.3
52.5°	16.2	20.5	27.3	28.6	27.8
55°	14.1	18.8	21.8	20.5	18.4
57.5°	12.0	17.5	17.9	15.4	15.8
60°	9.8	15.8	15.4	13.2	13.7
62.5°	8.1	14.5	13.2	12.0	12.0
65°	6.8	12.8	11.5	10.7	10.7
67.5°	5.6	11.5	10.2	9.4	9.4
70°	4.7	10.2	9.0	8.1	8.1
72.5°	4.3	9.0	8.1	7.3	7.3
75°	3.4	7.7	7.3	6.4	6.0
77.5°	3.0	6.4	6.4	6.0	5.1
80°	2.6	5.6	6.0	5.1	4.3
82.5°	2.6	5.1	5.1	4.7	3.4
85°	2.1	4.3	4.7	4.3	3.0
87.5°	1.3	3.8	3.8	3.4	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)