

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: P1057901

Luminaire Tested: S122RDR-S290D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057901
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-S290D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

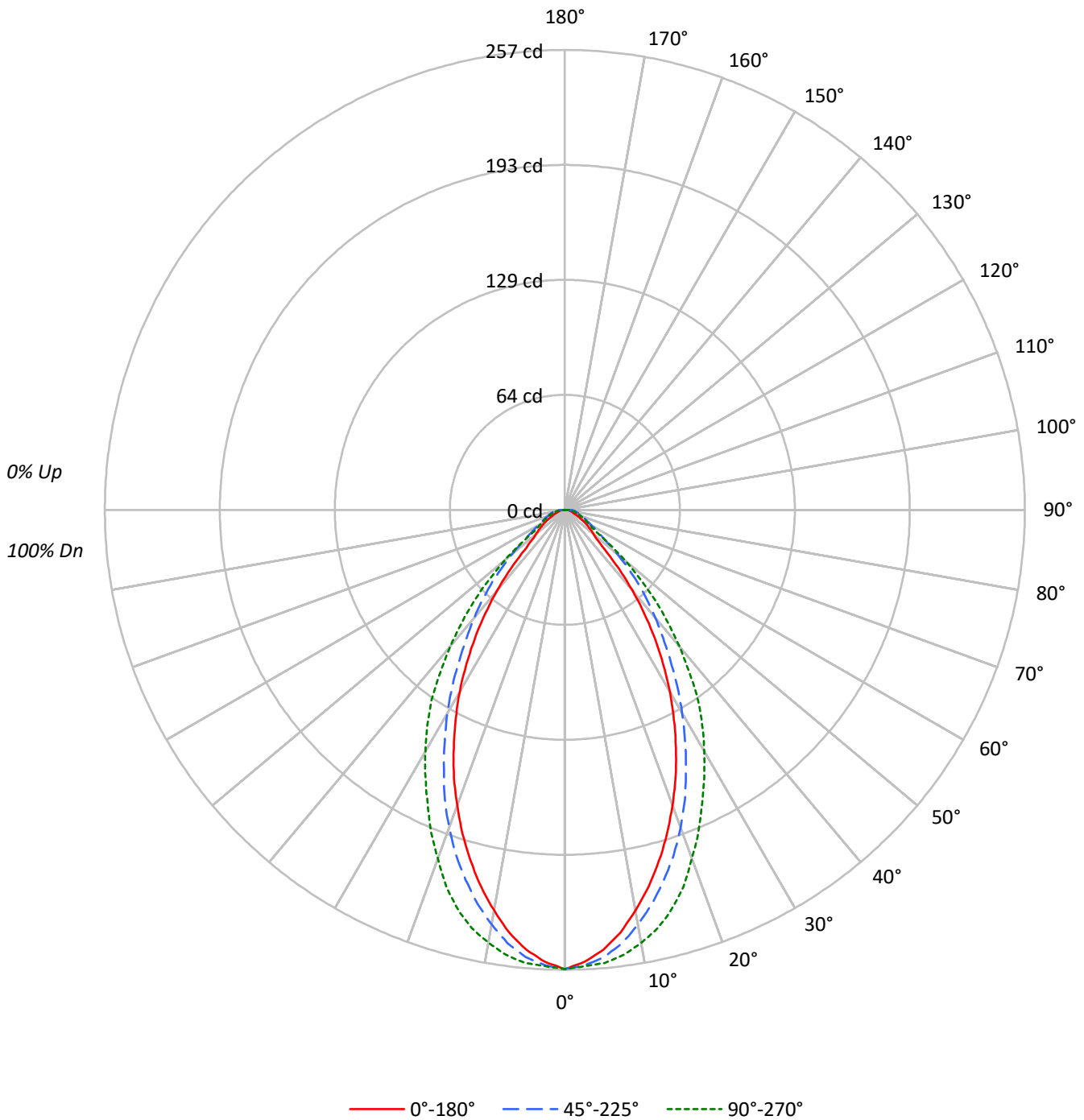
Lumens per Lamp: N/A
Luminaire Lumens: 309.6 lumens
Efficiency: N/A
Efficacy: 24.8 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4735	4735	4735
5°	4570	4647	4709
10°	4259	4409	4604
15°	3880	4088	4413
20°	3450	3709	4073
25°	2989	3258	3691
30°	2501	2793	3320
35°	1973	2313	2922
40°	1414	1893	2394
45°	827	1495	1853
50°	597	1088	1252
55°	502	775	656
60°	402	627	561
65°	332	559	515
70°	281	534	486
75°	271	570	471
80°	298	701	499
85°	508	1101	699

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1853 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	7.6
10°-20°	60.2	19.5
20°-30°	74.0	23.9
30°-40°	65.5	21.1
40°-50°	41.8	13.5
50°-60°	20.4	6.6
60°-70°	12.1	3.9
70°-80°	7.7	2.5
80°-90°	4.3	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°	157.8	51.0
0°-40°	223.3	72.1
0°-60°	285.4	92.2
0°-90°	309.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	309.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	257	257	257	257	257	
5°	247	252	251	252	254	23
15°	203	209	214	224	231	57
25°	147	152	160	170	181	67
35°	88	92	103	117	130	54
45°	32	41	57	64	71	27
55°	16	21	24	23	20	14
65°	8	14	13	12	12	8
75°	4	8	8	7	7	4
85°	2	5	5	5	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	256.6	256.6	256.6	256.6	256.6
2.5°	252.8	257.6	254.7	254.7	255.2
5°	246.7	251.9	250.9	251.9	254.2
7.5°	238.2	243.4	244.3	248.1	250.9
10°	227.3	232.5	235.3	241.5	245.7
12.5°	215.9	221.1	225.4	233.4	239.6
15°	203.1	208.8	214.0	223.5	231.0
17.5°	189.9	195.5	202.2	211.6	220.6
20°	175.7	180.9	188.9	197.9	207.4
22.5°	161.9	166.7	175.2	183.7	195.1
25°	146.8	152.0	160.0	170.0	181.3
27.5°	132.1	137.3	145.4	156.7	168.6
30°	117.4	122.2	131.1	143.0	155.8
32.5°	102.3	107.0	116.9	129.7	143.0
35°	87.6	92.3	102.7	116.9	129.7
37.5°	72.9	78.1	90.0	103.2	114.1
40°	58.7	64.9	78.6	90.0	99.4
42.5°	44.5	53.0	67.7	77.2	84.7
45°	31.7	40.7	57.3	64.4	71.0
47.5°	24.1	31.2	47.3	52.6	56.8
50°	20.8	25.6	37.9	41.7	43.6
52.5°	18.0	22.7	30.3	31.7	30.8
55°	15.6	20.8	24.1	22.7	20.4
57.5°	13.3	19.4	19.9	17.0	17.5
60°	10.9	17.5	17.0	14.7	15.2
62.5°	9.0	16.1	14.7	13.3	13.3
65°	7.6	14.2	12.8	11.8	11.8
67.5°	6.2	12.8	11.4	10.4	10.4
70°	5.2	11.4	9.9	9.0	9.0
72.5°	4.7	9.9	9.0	8.0	8.0
75°	3.8	8.5	8.0	7.1	6.6
77.5°	3.3	7.1	7.1	6.6	5.7
80°	2.8	6.2	6.6	5.7	4.7
82.5°	2.8	5.7	5.7	5.2	3.8
85°	2.4	4.7	5.2	4.7	3.3
87.5°	1.4	4.3	4.3	3.8	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)