

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: P1057931

Luminaire Tested: S122RDR-S290D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057931  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D935-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

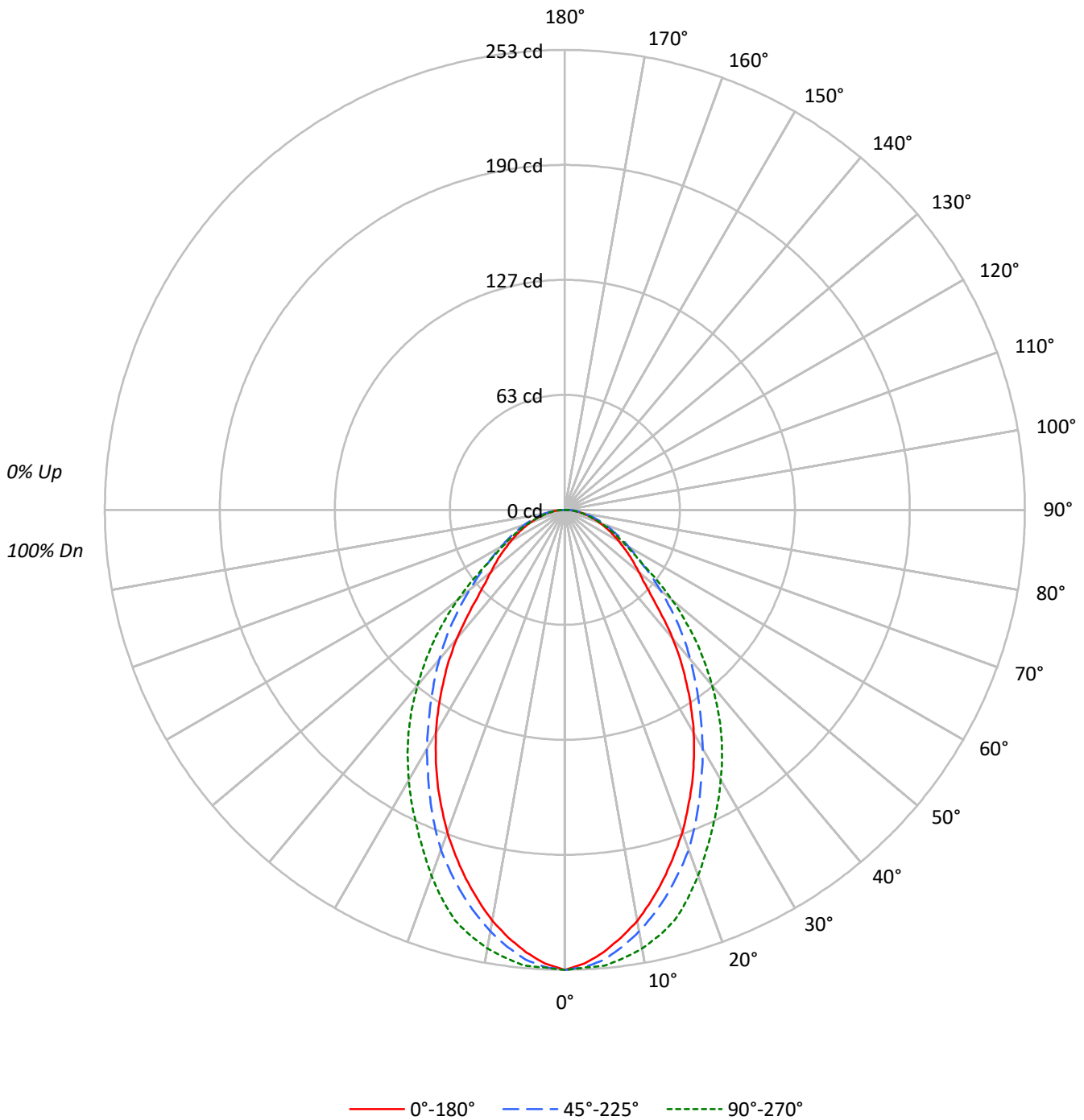
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 412.2 lumens  
Efficiency: N/A  
Efficacy: 33.0 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4670	4670	4670
5°	4525	4601	4662
10°	4302	4413	4591
15°	4014	4176	4464
20°	3707	3910	4206
25°	3374	3567	3919
30°	3021	3232	3656
35°	2631	2888	3377
40°	2221	2585	3035
45°	1764	2281	2657
50°	1519	1961	2205
55°	1383	1679	1689
60°	1262	1491	1436
65°	1157	1349	1266
70°	1068	1246	1128
75°	998	1176	998
80°	935	1137	893
85°	932	1164	783

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2657 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.4	5.7
10°-20°	61.8	15.0
20°-30°	81.3	19.7
30°-40°	81.7	19.8
40°-50°	66.3	16.1
50°-60°	45.6	11.1
60°-70°	29.9	7.2
70°-80°	16.6	4.0
80°-90°	5.6	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°	166.4	40.4
0°-40°	248.2	60.2
0°-60°	360.1	87.4
0°-90°	412.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	412.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	253	253	253	253	253	
5°	244	249	248	250	252	23
15°	210	215	219	227	234	59
25°	166	170	175	183	192	76
35°	117	122	128	140	150	73
45°	68	75	87	95	102	53
55°	43	48	52	53	52	39
65°	26	32	31	29	29	26
75°	14	17	16	15	14	15
85°	4	6	6	5	4	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	253.1	253.1	253.1	253.1	253.1
2.5°	249.8	254.2	251.7	251.7	252.0
5°	244.3	249.1	248.4	249.5	251.7
7.5°	237.3	242.5	242.5	245.8	248.7
10°	229.6	234.8	235.5	240.6	245.0
12.5°	220.1	225.2	227.4	234.0	239.9
15°	210.1	215.3	218.6	226.7	233.7
17.5°	199.5	204.6	209.0	217.5	224.5
20°	188.8	193.6	199.1	206.5	214.2
22.5°	177.1	182.2	187.4	194.3	203.2
25°	165.7	170.1	175.2	183.0	192.5
27.5°	153.6	158.3	163.1	172.3	182.2
30°	141.8	146.6	151.7	161.3	171.6
32.5°	129.3	134.5	139.6	150.3	160.9
35°	116.8	122.3	128.2	139.6	149.9
37.5°	104.7	110.6	117.6	129.3	138.1
40°	92.2	98.5	107.3	117.6	126.0
42.5°	79.0	86.7	97.4	106.2	113.9
45°	67.6	75.3	87.4	95.2	101.8
47.5°	59.1	65.4	77.2	83.8	89.3
50°	52.9	57.7	68.3	73.1	76.8
52.5°	47.8	52.5	59.9	63.2	64.3
55°	43.0	47.8	52.2	53.3	52.5
57.5°	38.2	43.4	45.9	44.8	44.8
60°	34.2	39.7	40.4	38.9	38.9
62.5°	30.1	35.6	35.6	33.8	33.8
65°	26.5	31.6	30.9	29.4	29.0
67.5°	23.1	27.9	26.8	25.3	25.0
70°	19.8	24.2	23.1	21.3	20.9
72.5°	16.9	20.9	19.5	18.0	17.3
75°	14.0	17.3	16.5	14.7	14.0
77.5°	11.4	14.0	13.2	11.8	11.0
80°	8.8	11.0	10.7	9.2	8.4
82.5°	6.6	8.4	8.1	7.0	5.9
85°	4.4	5.9	5.5	4.8	3.7
87.5°	2.2	4.0	3.7	3.3	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)