

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: P1057913

Luminaire Tested: S122RDR-S290D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057913  
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-S290D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

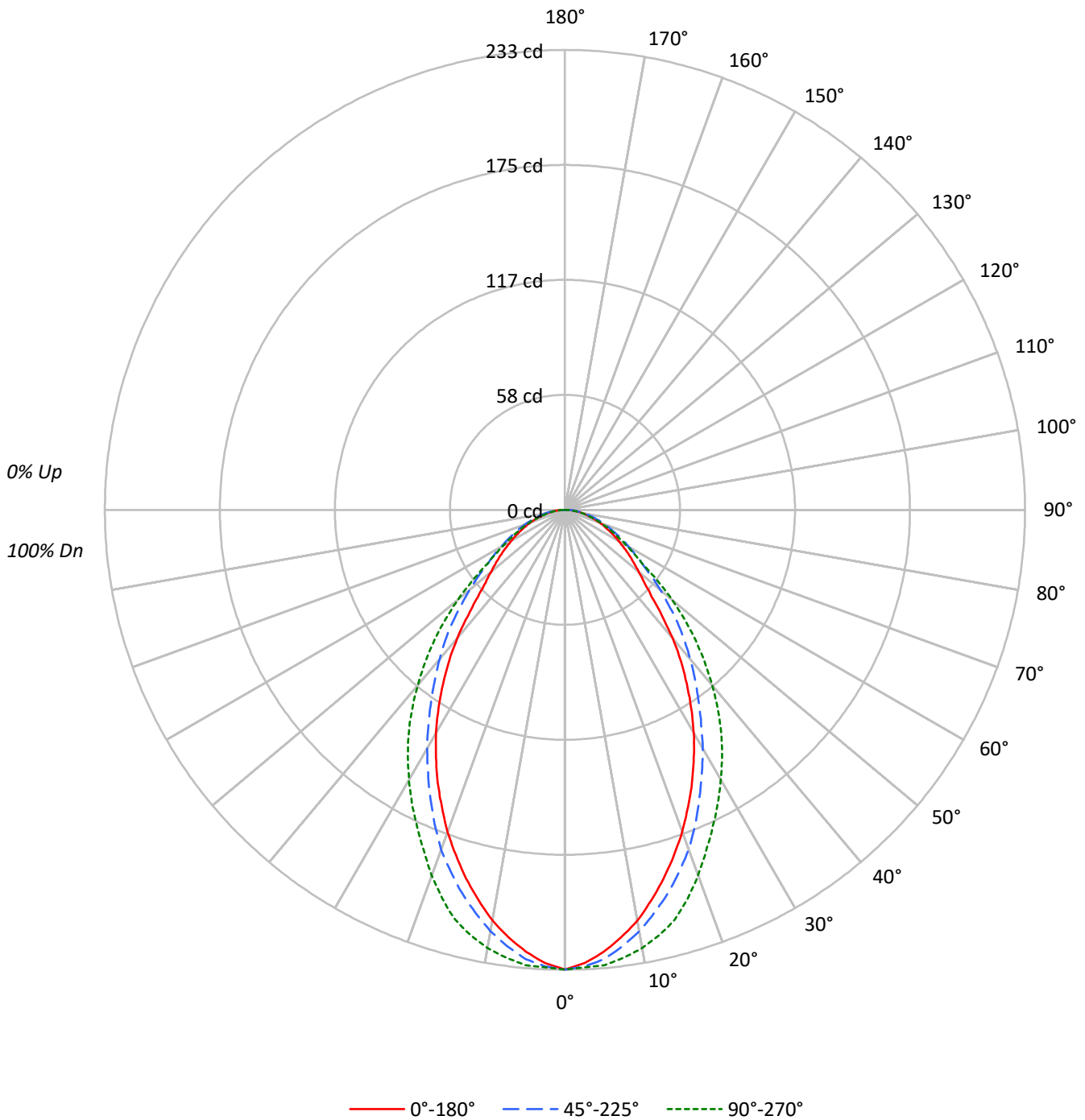
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 379.2 lumens  
Efficiency: N/A  
Efficacy: 30.3 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°	4298	4298	4298
5°	4164	4232	4288
10°	3959	4060	4225
15°	3693	3842	4107
20°	3411	3597	3870
25°	3103	3282	3606
30°	2781	2974	3364
35°	2422	2658	3106
40°	2043	2377	2792
45°	1623	2098	2443
50°	1398	1806	2027
55°	1271	1544	1554
60°	1159	1373	1321
65°	1061	1240	1166
70°	987	1149	1041
75°	913	1084	913
80°	861	1041	829
85°	868	1080	720

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2443 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.5	5.7
10°-20°	56.8	15.0
20°-30°	74.8	19.7
30°-40°	75.2	19.8
40°-50°	61.0	16.1
50°-60°	42.0	11.1
60°-70°	27.5	7.2
70°-80°	15.3	4.0
80°-90°	5.2	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°	153.1	40.4
0°-40°	228.3	60.2
0°-60°	331.3	87.4
0°-90°	379.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	379.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	233	233	233	233	233	
5°	225	229	228	230	232	21
15°	193	198	201	209	215	54
25°	152	156	161	168	177	70
35°	108	113	118	128	138	67
45°	62	69	80	88	94	49
55°	40	44	48	49	48	35
65°	24	29	28	27	27	24
75°	13	16	15	14	13	14
85°	4	5	5	4	3	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	232.9	232.9	232.9	232.9	232.9
2.5°	229.9	233.9	231.5	231.5	231.9
5°	224.8	229.2	228.5	229.5	231.5
7.5°	218.4	223.1	223.1	226.1	228.8
10°	211.3	216.0	216.7	221.4	225.5
12.5°	202.5	207.2	209.2	215.3	220.7
15°	193.3	198.1	201.1	208.6	215.0
17.5°	183.5	188.3	192.3	200.1	206.5
20°	173.7	178.1	183.2	190.0	197.1
22.5°	162.9	167.7	172.4	178.8	186.9
25°	152.4	156.5	161.2	168.3	177.1
27.5°	141.3	145.7	150.1	158.5	167.7
30°	130.5	134.9	139.6	148.4	157.9
32.5°	119.0	123.7	128.4	138.2	148.1
35°	107.5	112.6	118.0	128.4	137.9
37.5°	96.3	101.7	108.2	119.0	127.1
40°	84.8	90.6	98.7	108.2	115.9
42.5°	72.7	79.8	89.6	97.7	104.8
45°	62.2	69.3	80.4	87.5	93.6
47.5°	54.4	60.2	71.0	77.1	82.1
50°	48.7	53.1	62.9	67.3	70.6
52.5°	43.9	48.3	55.1	58.1	59.2
55°	39.5	43.9	48.0	49.0	48.3
57.5°	35.2	39.9	42.3	41.2	41.2
60°	31.4	36.5	37.2	35.8	35.8
62.5°	27.7	32.8	32.8	31.1	31.1
65°	24.3	29.1	28.4	27.0	26.7
67.5°	21.3	25.7	24.7	23.3	23.0
70°	18.3	22.3	21.3	19.6	19.3
72.5°	15.5	19.3	17.9	16.6	15.9
75°	12.8	15.9	15.2	13.5	12.8
77.5°	10.5	12.8	12.2	10.8	10.1
80°	8.1	10.1	9.8	8.5	7.8
82.5°	6.1	7.8	7.4	6.4	5.4
85°	4.1	5.4	5.1	4.4	3.4
87.5°	2.0	3.7	3.4	3.0	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)