

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: P1057941

Luminaire Tested: S122RDR-S290D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057941  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D940-X4F0-XX-UDD-WVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

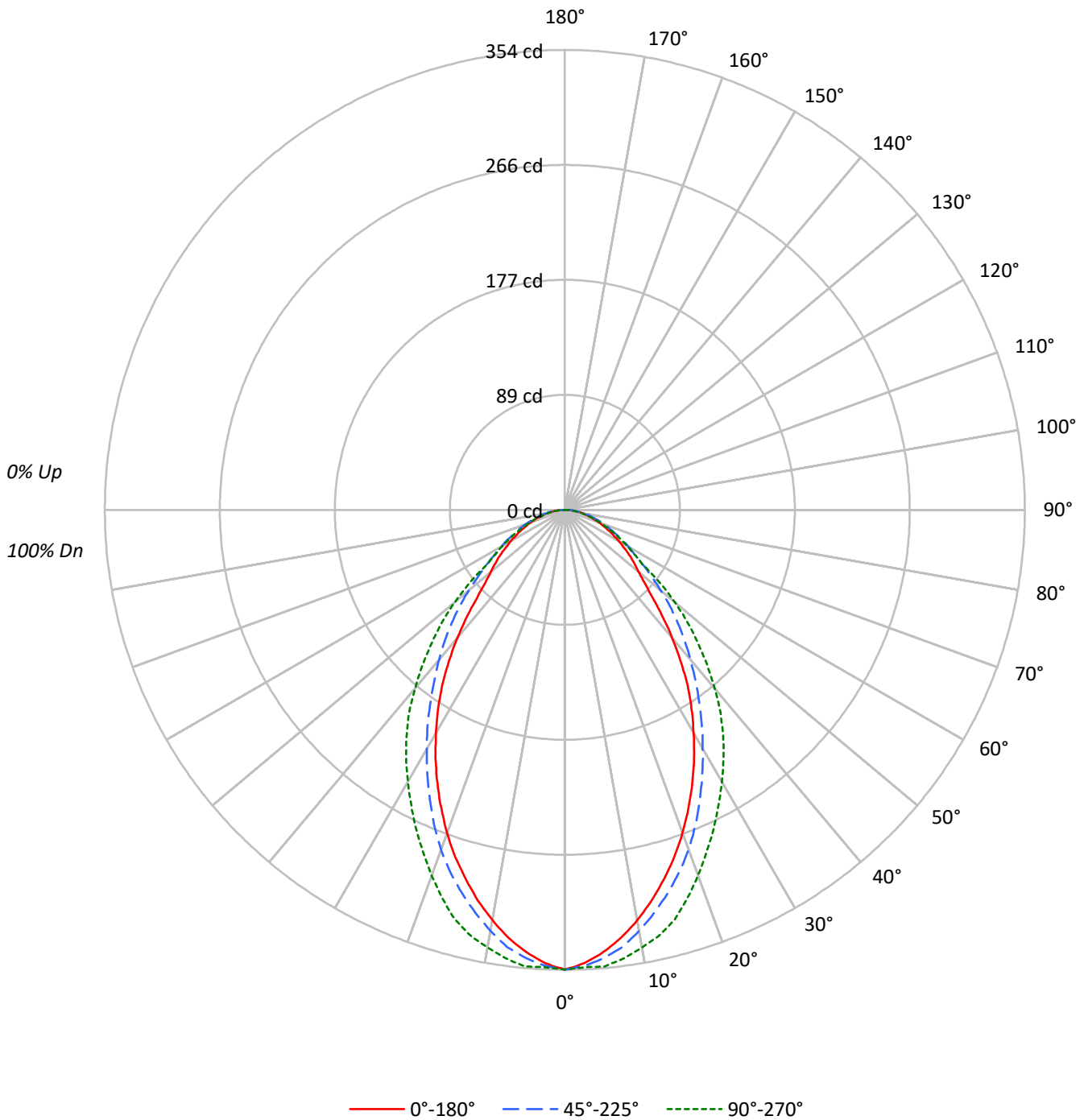
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 576.9 lumens  
Efficiency: N/A  
Efficacy: 46.2 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	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	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	46	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	46	39	35	45	39	35	44	38	34	33

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

	0°	45°	90°
0°	6530	6530	6530
5°	6329	6414	6533
10°	6011	6166	6410
15°	5626	5836	6237
20°	5200	5469	5881
25°	4726	5004	5516
30°	4223	4523	5148
35°	3703	4055	4782
40°	3098	3620	4317
45°	2482	3207	3773
50°	2130	2764	3166
55°	1946	2352	2339
60°	1768	2078	2037
65°	1611	1860	1777
70°	1478	1705	1581
75°	1383	1576	1383
80°	1296	1456	1211
85°	1291	1524	1037

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3773 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.7	5.7
10°-20°	86.5	15.0
20°-30°	114.1	19.8
30°-40°	114.9	19.9
40°-50°	93.5	16.2
50°-60°	63.8	11.0
60°-70°	41.4	7.2
70°-80°	22.8	4.0
80°-90°	7.4	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°	233.2	40.4
0°-40°	348.1	60.3
0°-60°	505.3	87.6
0°-90°	576.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	576.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	354	354	354	354	354	
5°	342	348	346	349	353	32
15°	294	302	306	318	326	83
25°	232	240	246	257	271	106
35°	164	173	180	196	212	102
45°	95	107	123	134	145	75
55°	60	67	73	73	73	54
65°	37	44	43	40	41	37
75°	19	24	22	20	19	21
85°	6	8	7	6	5	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	353.9	353.9	353.9	353.9	353.9
2.5°	349.3	355.0	351.2	351.6	352.4
5°	341.7	348.2	346.3	349.3	352.7
7.5°	332.2	338.7	339.4	344.0	348.2
10°	320.8	328.0	329.1	336.0	342.1
12.5°	308.2	316.2	317.7	327.6	335.6
15°	294.5	302.1	305.5	318.1	326.5
17.5°	280.1	287.3	292.6	304.0	313.5
20°	264.8	271.7	278.5	288.8	299.5
22.5°	248.5	256.1	262.6	272.8	285.0
25°	232.1	239.7	245.8	256.8	270.9
27.5°	215.4	223.0	229.1	240.9	256.1
30°	198.2	206.2	212.3	225.6	241.6
32.5°	181.5	189.5	196.3	210.4	227.2
35°	164.4	172.8	180.0	195.6	212.3
37.5°	146.1	155.6	164.8	180.4	196.7
40°	128.6	139.3	150.3	164.8	179.2
42.5°	111.1	122.9	136.6	148.8	162.1
45°	95.1	106.9	122.9	133.6	144.6
47.5°	82.6	92.5	109.6	118.3	128.2
50°	74.2	81.0	96.3	103.1	110.3
52.5°	67.4	73.1	83.7	88.3	92.1
55°	60.5	66.6	73.1	73.4	72.7
57.5°	53.7	60.5	63.9	61.3	62.8
60°	47.9	54.8	56.3	53.7	55.2
62.5°	41.9	49.5	49.5	46.8	47.6
65°	36.9	43.8	42.6	40.3	40.7
67.5°	32.0	38.8	36.9	34.6	34.6
70°	27.4	33.9	31.6	29.3	29.3
72.5°	23.2	28.5	27.0	24.4	24.0
75°	19.4	24.0	22.1	19.8	19.4
77.5°	15.6	19.4	17.9	16.0	15.2
80°	12.2	15.6	13.7	12.2	11.4
82.5°	9.1	11.8	10.3	8.8	8.0
85°	6.1	8.0	7.2	5.7	4.9
87.5°	3.0	5.3	4.6	3.8	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)