

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: P1057926

Luminaire Tested: S122RDR-S290D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057926  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D935-X4F0-XX-UDD-BVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

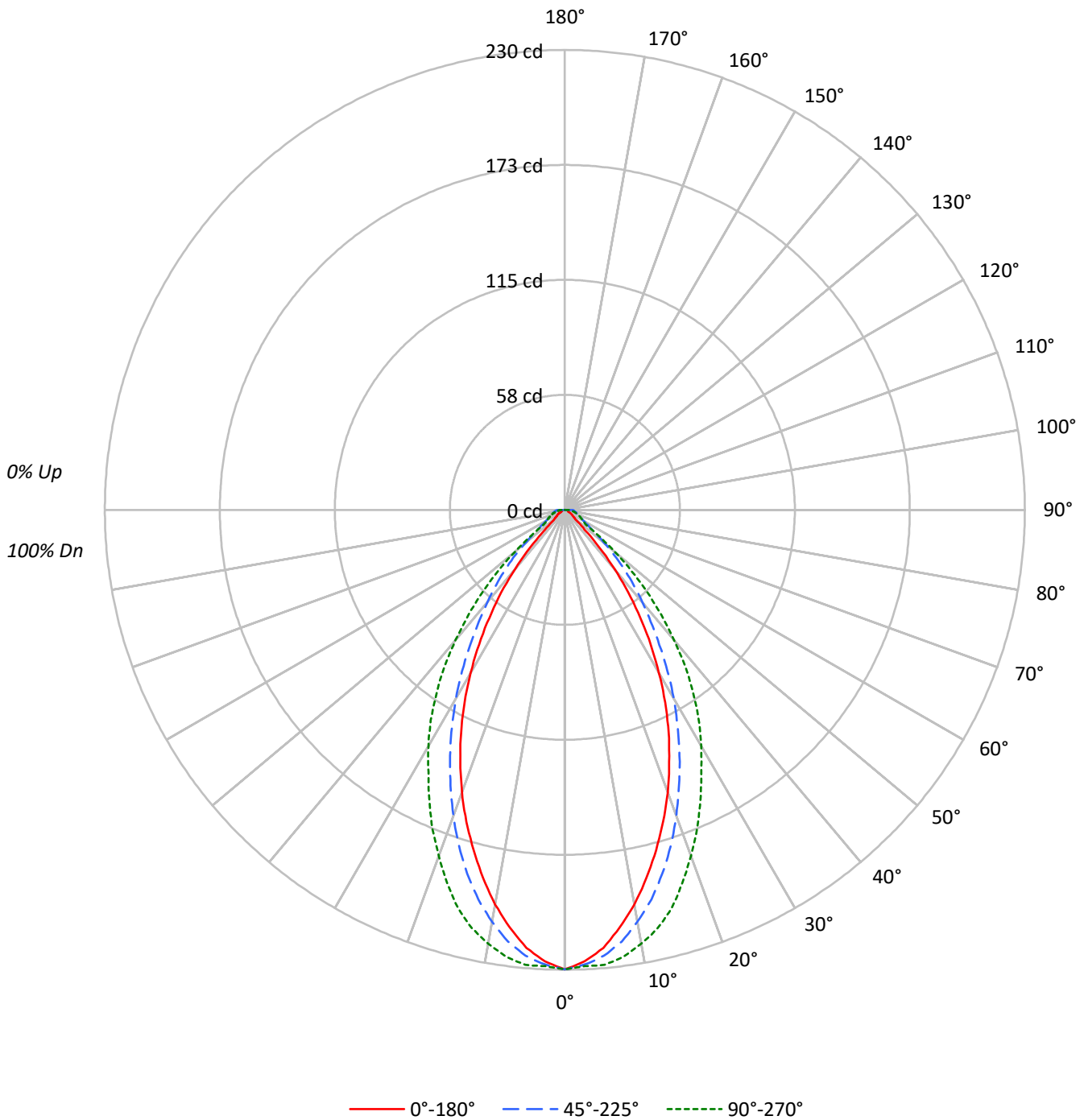
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 250.1 lumens  
Efficiency: N/A  
Efficacy: 20.0 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91  
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									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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56																												
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45																												
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42																												

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

	0°	45°	90°
0°	4240	4240	4240
5°	4073	4147	4231
10°	3755	3920	4128
15°	3364	3597	3941
20°	2953	3199	3617
25°	2500	2763	3264
30°	2005	2318	2906
35°	1482	1856	2518
40°	930	1453	2045
45°	365	1093	1516
50°	181	738	930
55°	142	486	415
60°	107	395	380
65°	79	371	371
70°	97	378	378
75°	107	421	392
80°	159	542	425
85°	318	932	614

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 1692 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.0	8.4
10°-20°	53.1	21.2
20°-30°	63.5	25.4
30°-40°	53.4	21.4
40°-50°	30.4	12.2
50°-60°	12.0	4.8
60°-70°	7.6	3.0
70°-80°	5.6	2.2
80°-90°	3.6	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°	137.5	55.0
0°-40°	191.0	76.4
0°-60°	233.4	93.3
0°-90°	250.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	250.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	230	230	230	230	230	
5°	220	225	224	226	228	20
15°	176	182	188	199	206	49
25°	123	128	136	150	160	56
35°	66	72	82	100	112	41
45°	14	25	42	53	58	13
55°	4	10	15	15	13	4
65°	2	8	8	8	8	2
75°	2	6	6	6	6	2
85°	2	4	4	4	3	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	229.8	229.8	229.8	229.8	229.8
2.5°	226.1	230.2	227.6	228.0	228.4
5°	219.9	224.7	223.9	226.5	228.4
7.5°	210.7	215.8	217.7	222.1	225.4
10°	200.4	206.3	209.2	216.2	220.3
12.5°	188.6	195.3	199.7	208.5	214.4
15°	176.1	182.4	188.3	199.3	206.3
17.5°	163.6	169.9	176.1	188.3	195.6
20°	150.4	156.3	162.9	175.8	184.2
22.5°	136.4	142.7	149.3	162.5	172.8
25°	122.8	128.3	135.7	149.7	160.3
27.5°	108.5	114.0	122.1	136.4	147.8
30°	94.1	99.7	108.8	123.6	136.4
32.5°	79.8	85.7	95.6	111.8	124.7
35°	65.8	71.7	82.4	100.0	111.8
37.5°	52.2	58.8	70.6	87.9	98.9
40°	38.6	46.3	60.3	75.7	84.9
42.5°	25.7	35.3	50.7	63.6	71.3
45°	14.0	24.6	41.9	52.6	58.1
47.5°	7.7	15.8	33.5	41.9	45.2
50°	6.3	11.0	25.7	32.0	32.4
52.5°	5.1	9.9	19.1	22.8	21.0
55°	4.4	9.6	15.1	15.4	12.9
57.5°	3.7	9.2	12.5	11.0	11.0
60°	2.9	9.2	10.7	9.9	10.3
62.5°	2.2	9.2	9.6	8.8	9.2
65°	1.8	8.5	8.5	8.1	8.5
67.5°	1.8	7.7	7.7	7.4	7.7
70°	1.8	7.4	7.0	7.0	7.0
72.5°	1.5	6.6	6.6	6.3	6.3
75°	1.5	5.9	5.9	5.5	5.5
77.5°	1.5	5.5	5.5	5.1	4.8
80°	1.5	4.8	5.1	4.8	4.0
82.5°	1.5	4.4	4.8	4.4	3.3
85°	1.5	4.0	4.4	4.0	2.9
87.5°	1.1	4.0	4.0	3.3	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)