

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: P1057936

Luminaire Tested: S122RDR-S290D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057936  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D940-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

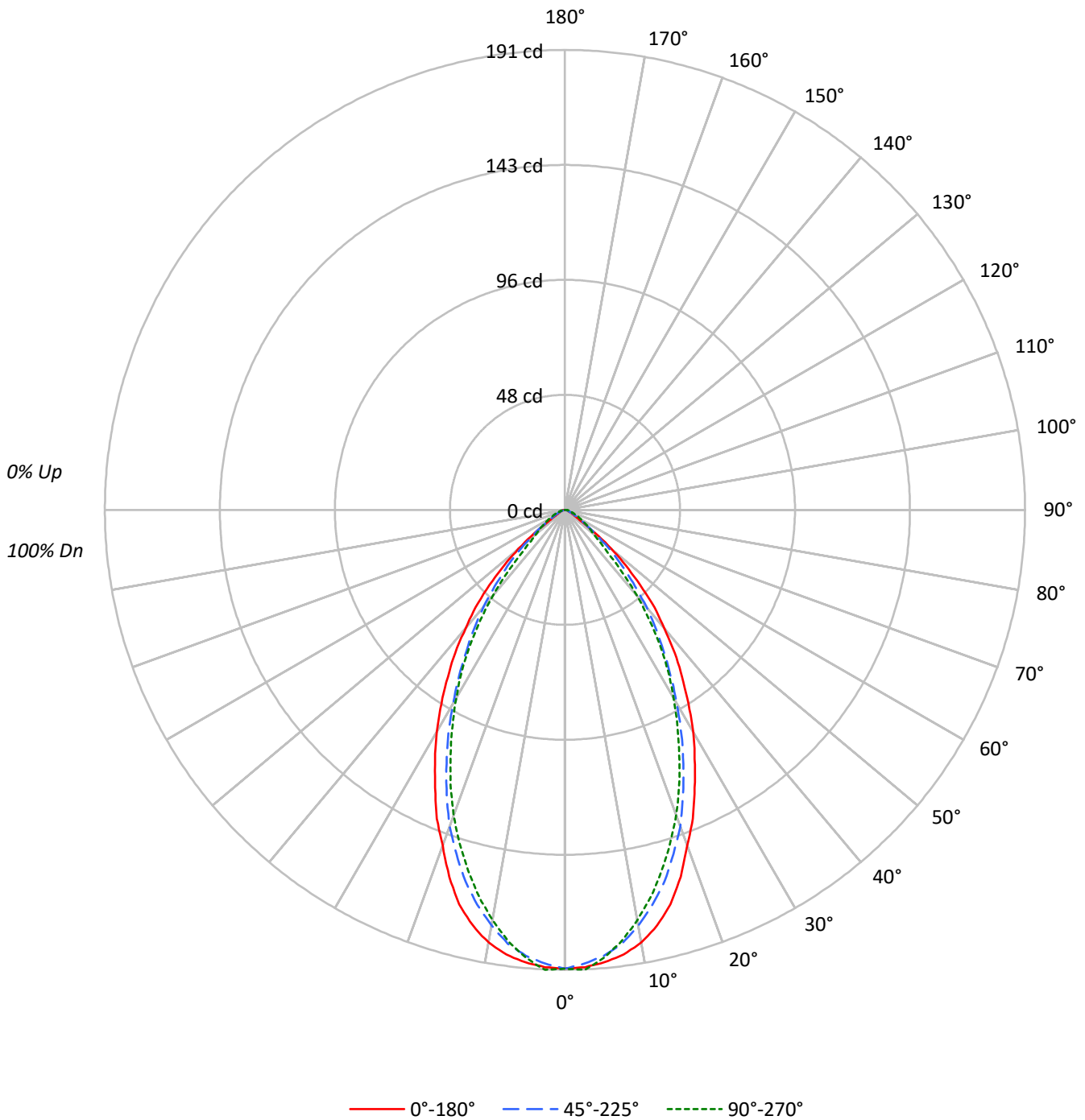
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 204.9 lumens  
Efficiency: N/A  
Efficacy: 16.4 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 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	100	100	96	96	96	92	92	92	88	88	88	84																
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92	92	92	88	88	87	85	84	84	84	80	80	78	76															
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84	84	84	82	82	81	79	78	78	78	74	74	71	70															
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76	76	76	76	76	74	73	72	72	72	70	69	65	64															
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70	70	70	70	70	68	67	66	66	66	64	64	60	59															
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64	64	64	64	64	64	64	64	64	64	64	64	64	64															
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59	59	59	59	59	59	59	59	59	59	59	59	59	59															
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54	54	54	54	54	54	54	54	54	54	54	54	54	54															
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50	50	50	50	50	50	50	50	50	50	50	50	50	50															
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47	47	47	47	47	47	47	47	47	47	47	47	47	47															
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44	44	44	44	44	44	44	44	44	44	44	44	44	44															

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

	0°	45°	90°
0°	3515	3515	3515
5°	3493	3443	3458
10°	3420	3285	3242
15°	3240	3051	2963
20°	2912	2747	2651
25°	2594	2368	2284
30°	2269	1977	1920
35°	1910	1602	1550
40°	1539	1265	1118
45°	1151	913	665
50°	721	588	436
55°	244	318	354
60°	140	196	280
65°	100	131	214
70°	81	103	162
75°	57	78	135
80°	43	85	117
85°	0	0	85

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1151 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	17.6	8.6
10°-20°	44.9	21.9
20°-30°	54.1	26.4
30°-40°	46.2	22.6
40°-50°	27.1	13.2
50°-60°	9.8	4.8
60°-70°	3.5	1.7
70°-80°	1.4	0.7
80°-90°	0.3	0.1
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°	116.6	56.9
0°-40°	162.8	79.5
0°-60°	199.7	97.5
0°-90°	204.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	204.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	190	190	190	190	190	
5°	189	189	186	187	187	18
15°	170	167	160	157	155	47
25°	127	122	116	114	112	58
35°	85	78	71	70	69	53
45°	44	40	35	29	26	34
55°	8	11	10	10	11	9
65°	2	3	3	4	5	2
75°	1	1	1	2	2	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	190.5	190.5	190.5	190.5	190.5
2.5°	190.1	190.5	188.6	190.5	191.2
5°	188.6	189.0	185.9	186.7	186.7
7.5°	186.3	185.9	181.7	181.0	180.6
10°	182.5	181.3	175.3	174.1	173.0
12.5°	176.8	174.5	168.0	166.1	164.6
15°	169.6	166.9	159.7	156.6	155.1
17.5°	159.7	156.6	149.8	146.8	145.2
20°	148.3	145.2	139.9	136.5	135.0
22.5°	138.8	133.8	128.1	125.8	123.9
25°	127.4	122.0	116.3	114.4	112.2
27.5°	116.7	110.3	104.6	103.0	101.1
30°	106.5	99.6	92.8	92.8	90.1
32.5°	95.4	89.0	81.7	81.4	79.8
35°	84.8	78.3	71.1	70.3	68.8
37.5°	74.9	68.4	61.6	59.3	57.4
40°	63.9	58.2	52.5	48.7	46.4
42.5°	55.1	48.7	43.0	38.4	35.4
45°	44.1	39.5	35.0	29.3	25.5
47.5°	34.2	31.2	27.4	20.9	19.0
50°	25.1	23.6	20.5	15.6	15.2
52.5°	16.0	16.7	14.8	12.2	13.3
55°	7.6	10.6	9.9	10.3	11.0
57.5°	4.9	5.3	7.2	8.4	9.1
60°	3.8	3.8	5.3	6.8	7.6
62.5°	3.0	3.0	4.2	5.7	6.1
65°	2.3	2.7	3.0	4.2	4.9
67.5°	1.9	1.9	2.3	3.4	3.8
70°	1.5	1.5	1.9	2.7	3.0
72.5°	1.1	1.1	1.5	2.3	2.3
75°	0.8	1.1	1.1	1.5	1.9
77.5°	0.8	0.8	0.8	1.1	1.5
80°	0.4	0.4	0.8	0.8	1.1
82.5°	0.4	0.4	0.4	0.4	0.8
85°	0.0	0.0	0.0	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)