

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: P1057921

Luminaire Tested: S122RDR-S290D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057921  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D930-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

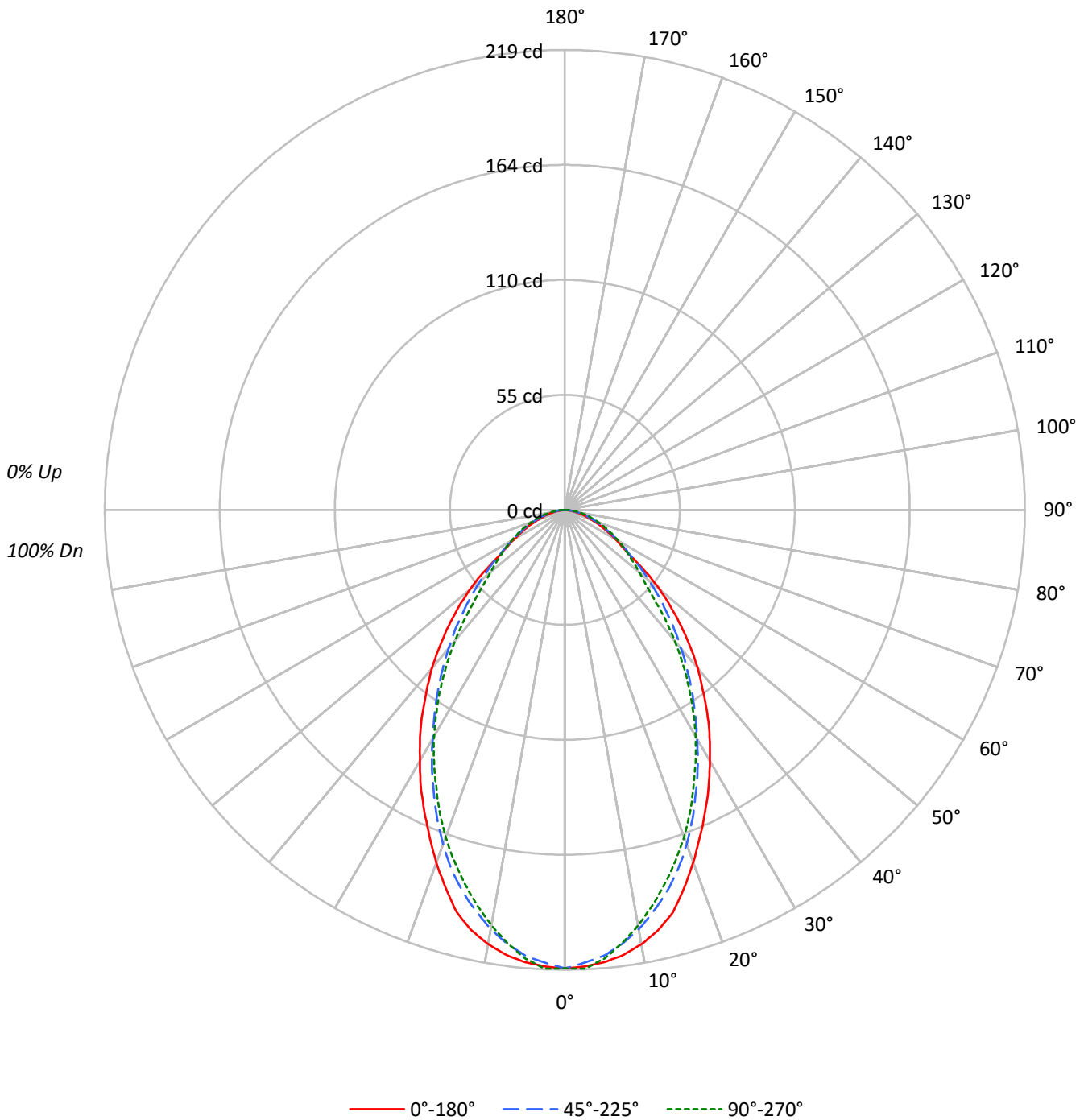
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 331.5 lumens  
Efficiency: N/A  
Efficacy: 26.5 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
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	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				

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

	0°	45°	90°
0°	4028	4028	4028
5°	4005	3947	3973
10°	3935	3798	3764
15°	3792	3593	3519
20°	3509	3330	3256
25°	3221	3007	2952
30°	2940	2680	2653
35°	2663	2372	2318
40°	2370	2069	1958
45°	2041	1777	1568
50°	1688	1496	1318
55°	1219	1242	1184
60°	1015	1067	1078
65°	865	926	987
70°	712	825	901
75°	592	692	820
80°	446	553	744
85°	148	296	656

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2041 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.2	6.1
10°-20°	53.1	16.0
20°-30°	68.8	20.7
30°-40°	67.5	20.3
40°-50°	53.1	16.0
50°-60°	34.8	10.5
60°-70°	21.2	6.4
70°-80°	10.6	3.2
80°-90°	2.3	0.7
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°	142.1	42.9
0°-40°	209.6	63.2
0°-60°	297.5	89.7
0°-90°	331.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	331.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	218	218	218	218	218	
5°	216	216	213	214	214	20
15°	198	196	188	186	184	55
25°	158	153	148	147	145	73
35°	118	112	105	105	103	74
45°	78	73	68	63	60	60
55°	38	40	39	37	37	36
65°	20	20	21	22	23	20
75°	8	9	10	11	12	9
85°	1	1	1	2	3	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	218.3	218.3	218.3	218.3	218.3
2.5°	217.6	218.0	215.9	218.0	218.7
5°	216.2	216.2	213.1	214.5	214.5
7.5°	213.8	213.4	208.6	208.6	208.2
10°	210.0	208.6	202.7	201.6	200.9
12.5°	205.1	202.7	195.7	194.0	192.9
15°	198.5	195.7	188.1	185.6	184.2
17.5°	188.8	186.0	179.4	176.6	175.2
20°	178.7	174.5	169.6	167.2	165.8
22.5°	168.3	163.4	158.9	157.1	155.7
25°	158.2	153.0	147.7	147.0	145.0
27.5°	148.4	142.2	137.0	136.6	134.9
30°	138.0	131.4	125.8	126.2	124.5
32.5°	128.3	122.0	115.4	115.8	113.7
35°	118.2	111.6	105.3	105.0	102.9
37.5°	107.8	101.5	95.6	94.2	92.1
40°	98.4	92.1	85.9	83.4	81.3
42.5°	88.3	82.7	77.2	73.4	70.6
45°	78.2	73.4	68.1	63.3	60.1
47.5°	68.5	64.7	60.1	54.2	52.1
50°	58.8	56.0	52.1	46.9	45.9
52.5°	48.7	47.6	45.2	41.7	41.4
55°	37.9	40.0	38.6	37.2	36.8
57.5°	32.0	32.3	33.4	33.0	33.0
60°	27.5	27.5	28.9	29.2	29.2
62.5°	23.3	23.6	25.0	25.7	25.7
65°	19.8	20.2	21.2	22.2	22.6
67.5°	16.3	17.0	18.1	19.1	19.5
70°	13.2	13.9	15.3	16.3	16.7
72.5°	10.8	11.1	12.5	13.6	13.9
75°	8.3	8.7	9.7	11.1	11.5
77.5°	5.9	6.6	7.6	8.7	9.4
80°	4.2	4.5	5.2	6.6	7.0
82.5°	2.4	2.8	3.5	4.5	4.9
85°	0.7	1.0	1.4	2.4	3.1
87.5°	0.0	0.0	0.0	0.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)