

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: P1057887

Luminaire Tested: S122RDR-S290D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057887  
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-S290D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

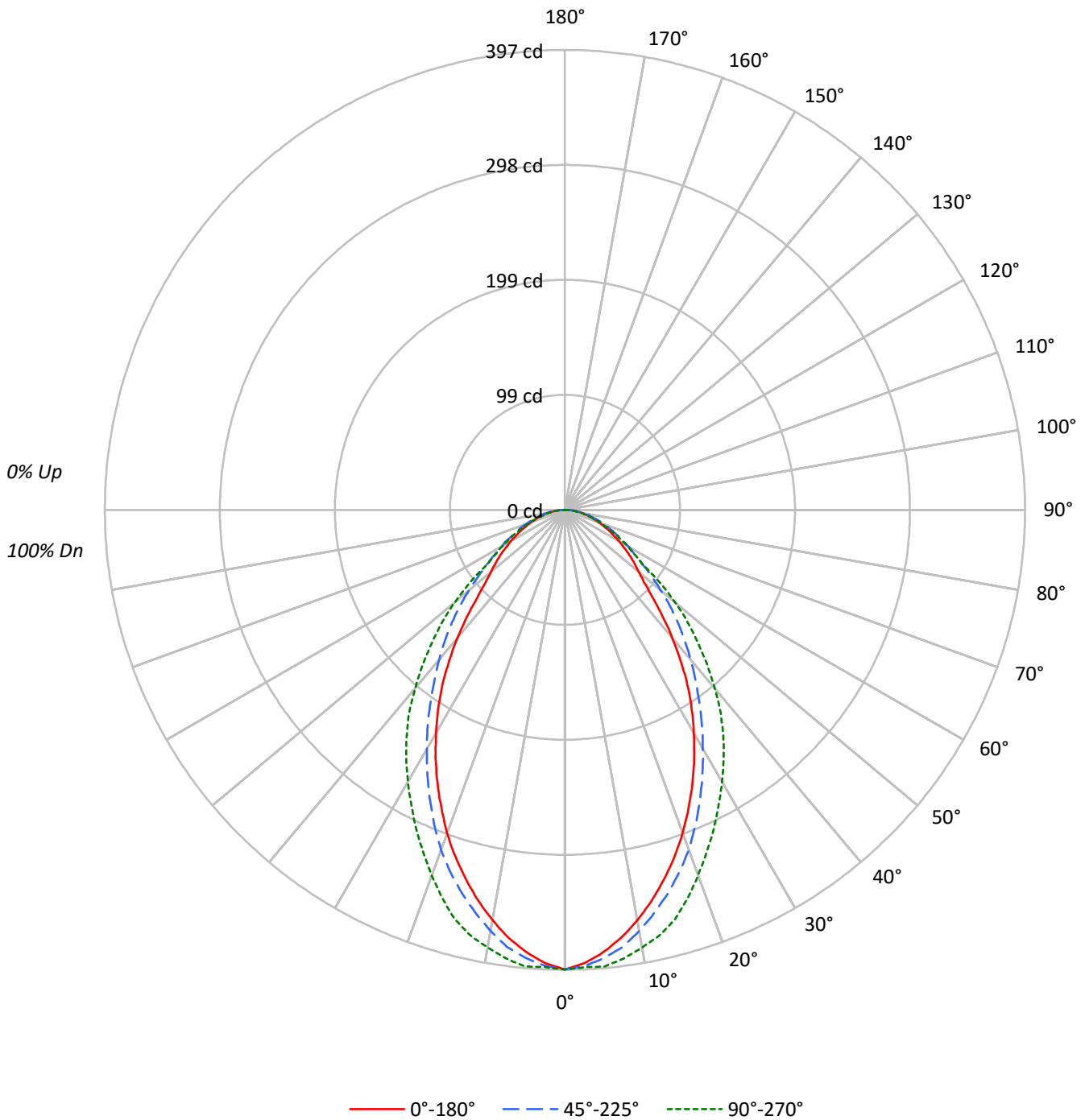
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 647.0 lumens  
Efficiency: N/A  
Efficacy: 51.8 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	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°	7322	7322	7322
5°	7098	7192	7328
10°	6740	6916	7188
15°	6310	6547	6994
20°	5832	6135	6594
25°	5300	5613	6185
30°	4737	5073	5774
35°	4152	4546	5364
40°	3473	4061	4842
45°	2784	3596	4233
50°	2388	3100	3551
55°	2181	2635	2622
60°	1985	2332	2284
65°	1808	2087	1995
70°	1656	1910	1775
75°	1554	1761	1554
80°	1456	1636	1360
85°	1440	1715	1164

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4233 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.6	5.7
10°-20°	97.0	15.0
20°-30°	127.9	19.8
30°-40°	128.8	19.9
40°-50°	104.8	16.2
50°-60°	71.5	11.0
60°-70°	46.4	7.2
70°-80°	25.6	4.0
80°-90°	8.3	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°	261.5	40.4
0°-40°	390.4	60.3
0°-60°	566.7	87.6
0°-90°	647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	647.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	397	397	397	397	397	
5°	383	390	388	392	396	36
15°	330	339	343	357	366	93
25°	260	269	276	288	304	119
35°	184	194	202	219	238	114
45°	107	120	138	150	162	84
55°	68	75	82	82	82	61
65°	41	49	48	45	46	41
75°	22	27	25	22	22	23
85°	7	9	8	6	6	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	396.8	396.8	396.8	396.8	396.8
2.5°	391.7	398.1	393.9	394.3	395.1
5°	383.2	390.4	388.3	391.7	395.6
7.5°	372.5	379.8	380.6	385.8	390.4
10°	359.7	367.8	369.1	376.8	383.6
12.5°	345.6	354.6	356.3	367.4	376.4
15°	330.3	338.8	342.7	356.7	366.1
17.5°	314.1	322.2	328.1	340.9	351.6
20°	297.0	304.7	312.4	323.9	335.8
22.5°	278.6	287.2	294.4	306.0	319.6
25°	260.3	268.8	275.7	288.0	303.8
27.5°	241.5	250.1	256.9	270.1	287.2
30°	222.3	231.3	238.1	253.0	271.0
32.5°	203.5	212.5	220.2	236.0	254.8
35°	184.3	193.7	201.8	219.3	238.1
37.5°	163.9	174.5	184.8	202.3	220.6
40°	144.2	156.2	168.6	184.8	201.0
42.5°	124.6	137.8	153.2	166.8	181.8
45°	106.7	119.9	137.8	149.8	162.2
47.5°	92.6	103.7	122.9	132.7	143.8
50°	83.2	90.9	108.0	115.6	123.7
52.5°	75.5	81.9	93.9	99.0	103.3
55°	67.8	74.7	81.9	82.4	81.5
57.5°	60.2	67.8	71.7	68.7	70.4
60°	53.8	61.4	63.2	60.2	61.9
62.5°	46.9	55.5	55.5	52.5	53.3
65°	41.4	49.1	47.8	45.2	45.7
67.5°	35.8	43.5	41.4	38.8	38.8
70°	30.7	38.0	35.4	32.9	32.9
72.5°	26.0	32.0	30.3	27.3	26.9
75°	21.8	26.9	24.7	22.2	21.8
77.5°	17.5	21.8	20.1	17.9	17.1
80°	13.7	17.5	15.4	13.7	12.8
82.5°	10.2	13.2	11.5	9.8	9.0
85°	6.8	9.0	8.1	6.4	5.5
87.5°	3.4	6.0	5.1	4.3	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)