

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: P1057790

Luminaire Tested: S122RDR-S1005D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057790  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S1005D830-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

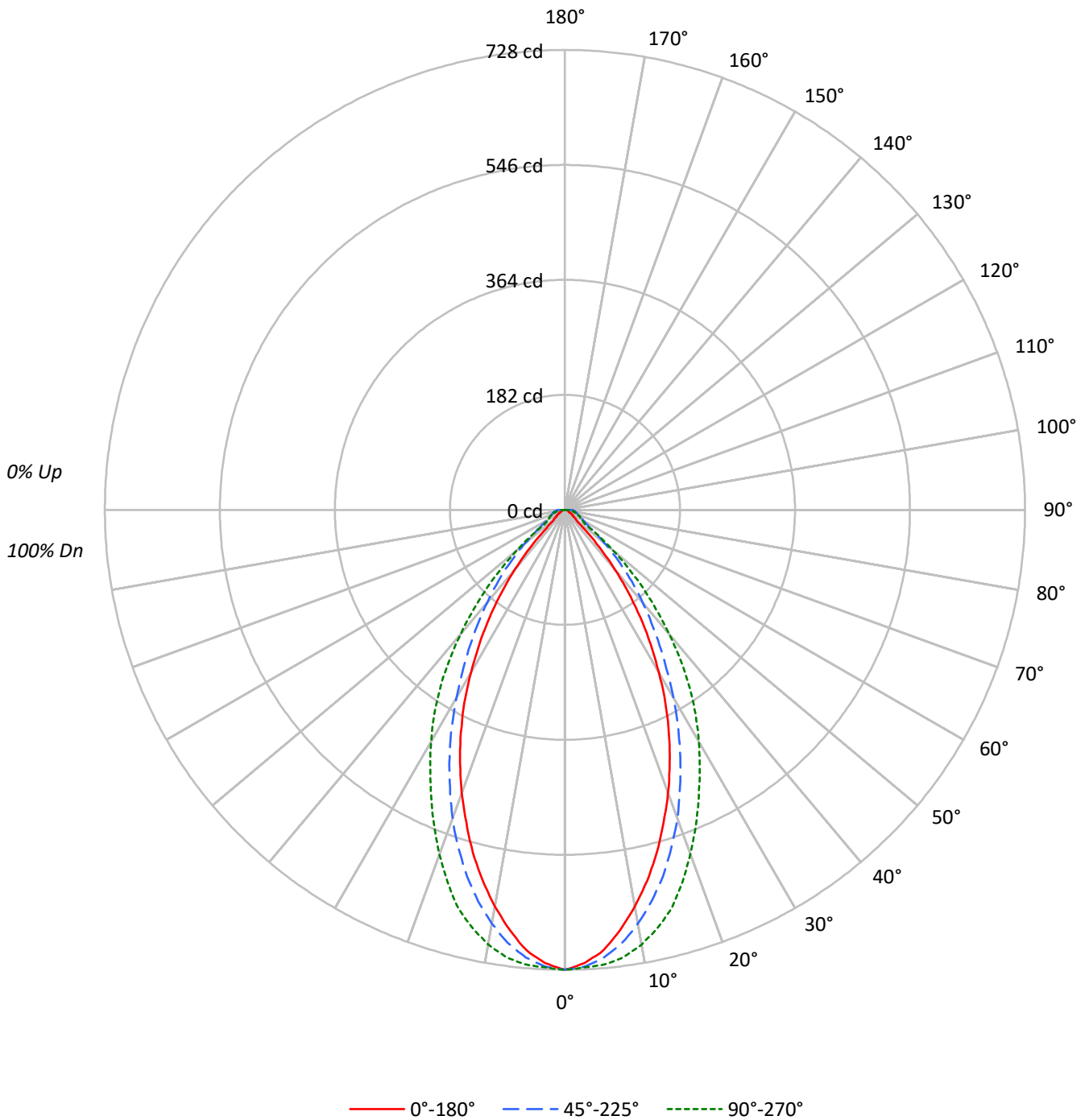
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 784.7 lumens  
Efficiency: N/A  
Efficacy: 18.8 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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	77	82	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	68	64	71	67	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57																												
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45																												
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42																												

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

	0°	45°	90°
0°	13432	13432	13432
5°	12966	13174	13379
10°	11941	12464	13090
15°	10736	11454	12467
20°	9365	10213	11391
25°	7922	8802	10192
30°	6328	7308	9032
35°	4681	5875	7758
40°	2956	4601	6181
45°	1164	3458	4548
50°	600	2322	2802
55°	492	1525	1255
60°	362	1236	1133
65°	306	1157	1157
70°	302	1203	1128
75°	399	1390	1191
80°	595	1775	1339
85°	889	2943	1778

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 5880 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.6	8.5
10°-20°	168.2	21.4
20°-30°	199.8	25.5
30°-40°	166.2	21.2
40°-50°	92.9	11.8
50°-60°	37.5	4.8
60°-70°	24.0	3.1
70°-80°	18.0	2.3
80°-90°	11.5	1.5
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°	434.6	55.4
0°-40°	600.8	76.6
0°-60°	731.2	93.2
0°-90°	784.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	784.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	728	728	728	728	728	
5°	700	713	711	717	722	65
15°	562	579	600	630	653	156
25°	389	404	432	466	501	177
35°	208	227	261	304	344	129
45°	45	75	132	155	174	42
55°	15	32	47	46	39	13
65°	7	28	26	25	26	7
75°	6	20	20	18	17	6
85°	4	13	14	13	8	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	727.9	727.9	727.9	727.9	727.9
2.5°	718.2	729.3	723.7	723.7	725.1
5°	700.0	712.6	711.2	716.8	722.3
7.5°	670.7	684.7	691.7	704.2	714.0
10°	637.3	652.6	665.2	684.7	698.6
12.5°	601.0	616.4	634.5	659.6	677.7
15°	562.0	578.7	599.6	630.3	652.6
17.5°	518.7	536.9	560.6	594.1	617.8
20°	476.9	495.0	520.1	553.6	580.1
22.5°	433.7	449.0	475.5	509.0	541.1
25°	389.1	404.4	432.3	465.8	500.6
27.5°	344.4	359.8	387.7	422.5	461.6
30°	297.0	313.8	343.0	382.1	423.9
32.5°	252.4	269.1	299.8	343.0	384.9
35°	207.8	227.3	260.8	304.0	344.4
37.5°	164.5	186.9	224.5	265.0	301.2
40°	122.7	146.4	191.0	225.9	256.6
42.5°	80.9	108.8	160.4	189.7	213.4
45°	44.6	75.3	132.5	154.8	174.3
47.5°	25.1	48.8	104.6	122.7	133.9
50°	20.9	36.3	80.9	93.4	97.6
52.5°	16.7	33.5	61.4	68.3	65.5
55°	15.3	32.1	47.4	46.0	39.0
57.5°	12.6	32.1	37.7	33.5	33.5
60°	9.8	30.7	33.5	29.3	30.7
62.5°	8.4	29.3	30.7	27.9	27.9
65°	7.0	27.9	26.5	25.1	26.5
67.5°	5.6	25.1	25.1	23.7	23.7
70°	5.6	23.7	22.3	20.9	20.9
72.5°	5.6	20.9	20.9	19.5	19.5
75°	5.6	19.5	19.5	18.1	16.7
77.5°	5.6	16.7	18.1	16.7	15.3
80°	5.6	15.3	16.7	15.3	12.6
82.5°	5.6	13.9	15.3	13.9	11.2
85°	4.2	12.6	13.9	12.6	8.4
87.5°	4.2	12.6	13.9	11.2	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)