

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: P1059329

Luminaire Tested: S123RDR-S775D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059329  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S775D830-X4F0-XX-UDD-BVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

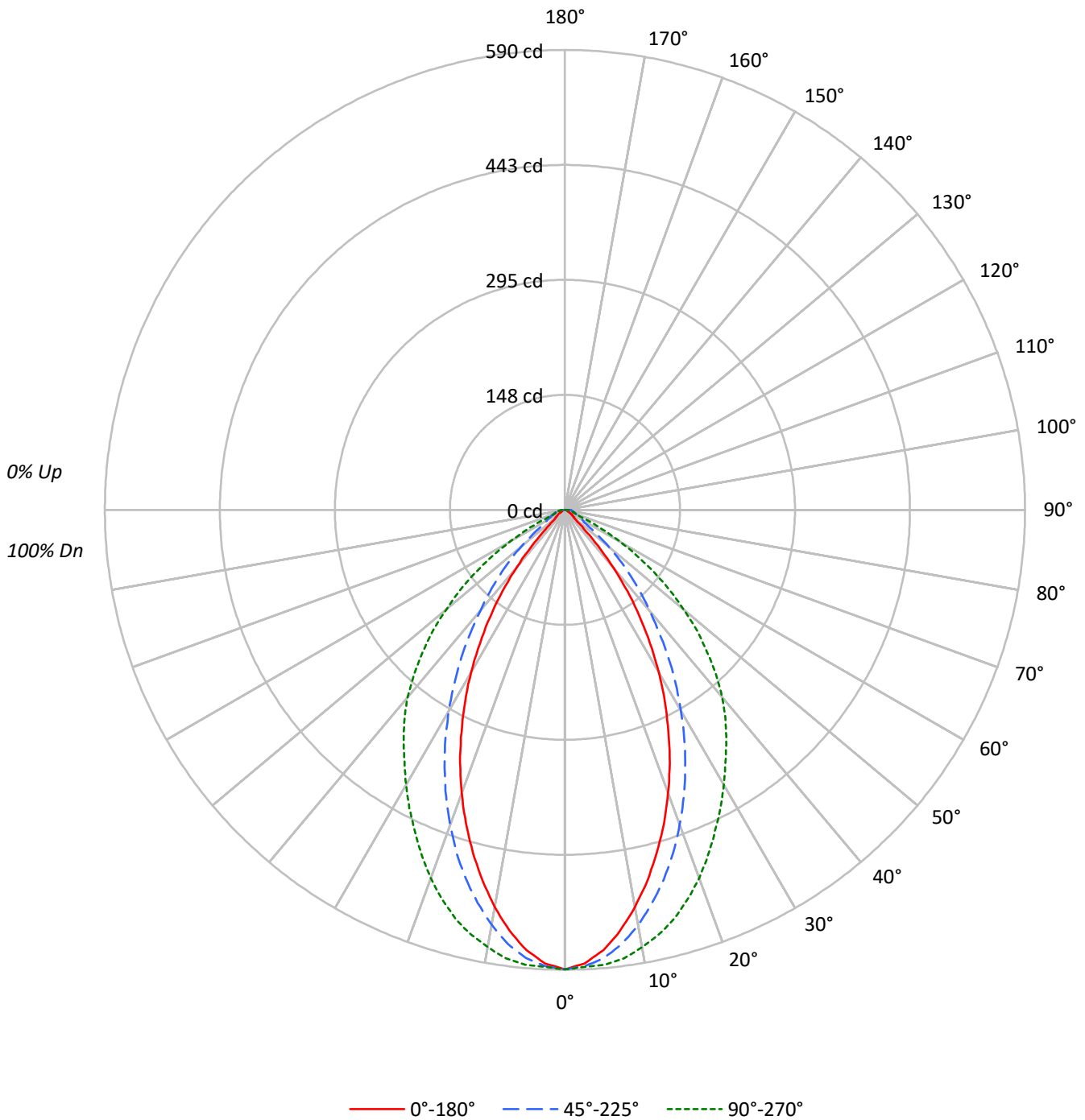
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 708.0 lumens  
Efficiency: N/A  
Efficacy: 27.4 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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	
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	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	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

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

	0°	45°	90°
0°	6922	6922	6922
5°	6682	6800	6906
10°	6169	6448	6792
15°	5534	5960	6596
20°	4832	5372	6284
25°	4064	4729	5898
30°	3264	4032	5524
35°	2390	3320	5168
40°	1478	2584	4809
45°	570	1946	4281
50°	280	1334	3623
55°	221	739	2842
60°	148	613	1905
65°	125	550	850
70°	124	494	494
75°	163	531	490
80°	243	669	548
85°	364	1091	728

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4281 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.0	7.6
10°-20°	138.4	19.5
20°-30°	171.7	24.3
30°-40°	153.8	21.7
40°-50°	101.1	14.3
50°-60°	50.7	7.2
60°-70°	20.0	2.8
70°-80°	11.2	1.6
80°-90°	7.0	1.0
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°	364.1	51.4
0°-40°	518.0	73.2
0°-60°	669.8	94.6
0°-90°	708.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	708.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	567	576	577	580	586	53
15°	455	470	490	524	543	127
25°	314	334	365	416	455	143
35°	167	189	232	303	360	103
45°	34	57	117	197	258	32
55°	11	13	36	97	139	10
65°	4	13	20	25	31	5
75°	4	12	12	11	11	4
85°	3	8	8	8	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	589.5	589.5	589.5	589.5	589.5
2.5°	582.3	590.4	585.9	585.9	586.8
5°	566.9	576.0	576.9	580.5	585.9
7.5°	544.4	556.1	561.5	572.3	580.5
10°	517.4	530.0	540.8	559.7	569.6
12.5°	487.6	500.2	516.5	542.6	557.9
15°	455.2	469.6	490.3	523.7	542.6
17.5°	421.8	436.2	461.5	499.3	523.7
20°	386.7	402.9	429.9	473.2	502.9
22.5°	351.5	369.5	398.4	445.3	479.5
25°	313.7	333.5	365.0	416.4	455.2
27.5°	277.6	298.3	331.7	387.6	431.7
30°	240.7	261.4	297.4	357.8	407.4
32.5°	202.8	226.2	264.1	329.9	383.1
35°	166.7	189.3	231.6	302.8	360.5
37.5°	131.6	154.1	198.3	276.7	338.0
40°	96.4	119.9	168.6	251.5	313.7
42.5°	63.1	87.4	142.4	226.2	286.6
45°	34.3	56.8	117.2	197.4	257.8
47.5°	18.9	30.6	94.6	170.4	229.8
50°	15.3	17.1	73.0	145.1	198.3
52.5°	12.6	14.4	52.3	120.8	169.5
55°	10.8	12.6	36.1	97.3	138.8
57.5°	9.0	10.8	28.8	74.8	109.1
60°	6.3	10.8	26.1	55.0	81.1
62.5°	5.4	10.8	22.5	37.9	54.1
65°	4.5	12.6	19.8	25.2	30.6
67.5°	3.6	12.6	17.1	16.2	16.2
70°	3.6	12.6	14.4	13.5	14.4
72.5°	3.6	13.5	13.5	12.6	12.6
75°	3.6	11.7	11.7	10.8	10.8
77.5°	3.6	10.8	10.8	9.9	9.9
80°	3.6	9.9	9.9	9.0	8.1
82.5°	3.6	9.0	9.0	8.1	7.2
85°	2.7	8.1	8.1	8.1	5.4
87.5°	2.7	7.2	8.1	7.2	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)