

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: P1059365

Luminaire Tested: S123RDR-S775D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059365  
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-S775D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

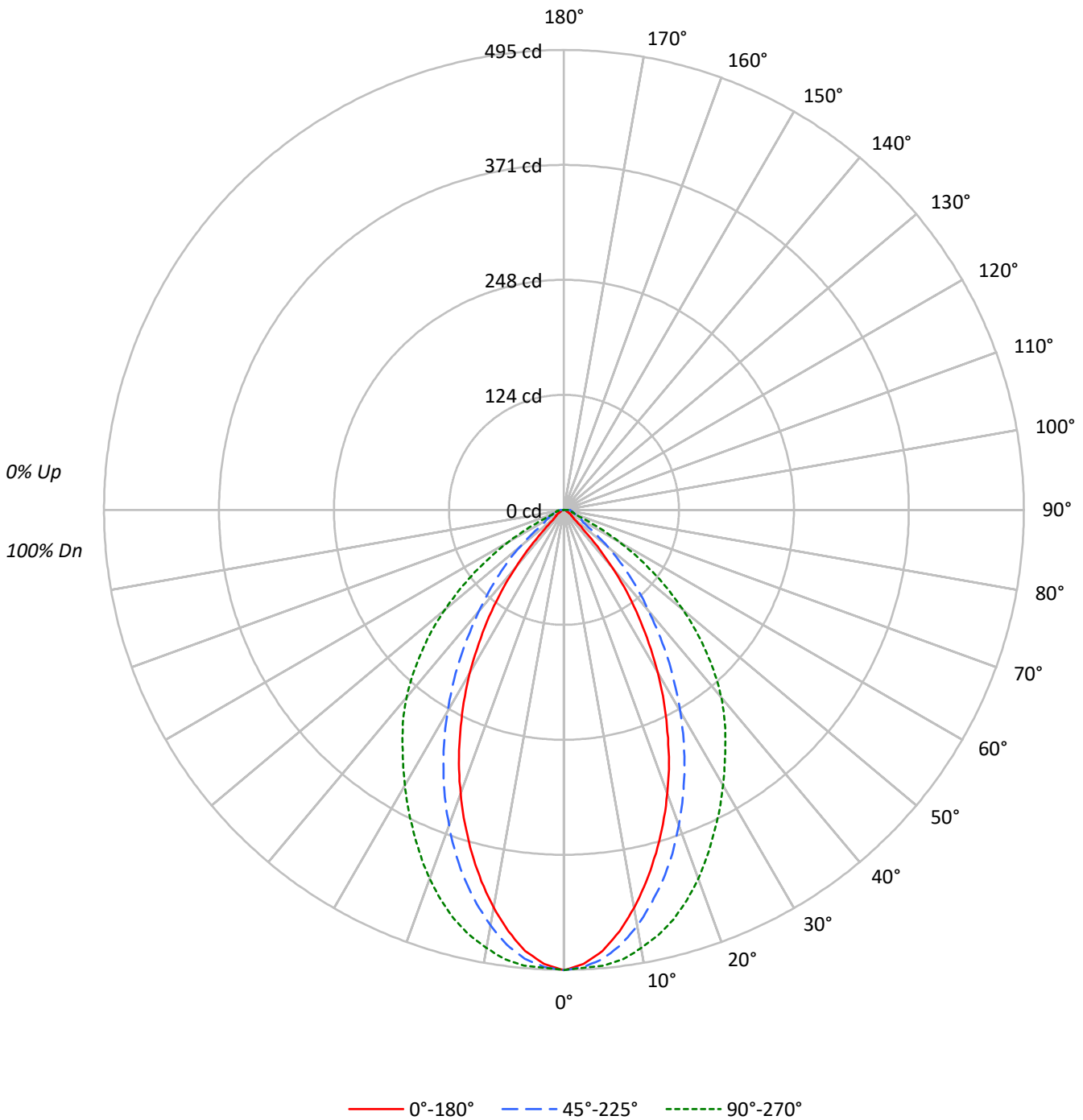
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 595.1 lumens  
Efficiency: N/A  
Efficacy: 23.1 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°	5817	5817	5817
5°	5617	5714	5804
10°	5184	5419	5709
15°	4651	5010	5543
20°	4061	4516	5282
25°	3415	3975	4957
30°	2743	3390	4643
35°	2008	2791	4343
40°	1243	2172	4041
45°	478	1636	3599
50°	236	1122	3045
55°	186	620	2389
60°	124	517	1602
65°	106	464	717
70°	103	415	415
75°	136	445	413
80°	203	561	460
85°	310	916	606

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3599 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.4	7.6
10°-20°	116.3	19.5
20°-30°	144.3	24.3
30°-40°	129.3	21.7
40°-50°	85.0	14.3
50°-60°	42.6	7.2
60°-70°	16.8	2.8
70°-80°	9.4	1.6
80°-90°	5.9	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°	306.1	51.4
0°-40°	435.4	73.2
0°-60°	563.0	94.6
0°-90°	595.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	595.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	495	495	495	495	495	
5°	476	484	485	488	492	44
15°	383	395	412	440	456	107
25°	264	280	307	350	383	121
35°	140	159	195	254	303	87
45°	29	48	98	166	217	27
55°	9	11	30	82	117	8
65°	4	11	17	21	26	4
75°	3	10	10	9	9	3
85°	2	7	7	7	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	495.4	495.4	495.4	495.4	495.4
2.5°	489.4	496.2	492.4	492.4	493.2
5°	476.5	484.1	484.8	487.9	492.4
7.5°	457.6	467.4	472.0	481.0	487.9
10°	434.8	445.4	454.5	470.4	478.8
12.5°	409.8	420.4	434.1	456.0	468.9
15°	382.6	394.7	412.1	440.1	456.0
17.5°	354.5	366.7	387.9	419.7	440.1
20°	325.0	338.6	361.4	397.7	422.7
22.5°	295.4	310.6	334.8	374.2	403.0
25°	263.6	280.3	306.8	350.0	382.6
27.5°	233.3	250.7	278.8	325.7	362.9
30°	202.3	219.7	250.0	300.7	342.4
32.5°	170.4	190.1	222.0	277.3	322.0
35°	140.1	159.1	194.7	254.5	303.0
37.5°	110.6	129.5	166.7	232.6	284.1
40°	81.1	100.8	141.7	211.4	263.6
42.5°	53.0	73.5	119.7	190.1	240.9
45°	28.8	47.7	98.5	165.9	216.7
47.5°	15.9	25.8	79.5	143.2	193.2
50°	12.9	14.4	61.4	122.0	166.7
52.5°	10.6	12.1	43.9	101.5	142.4
55°	9.1	10.6	30.3	81.8	116.7
57.5°	7.6	9.1	24.2	62.9	91.7
60°	5.3	9.1	22.0	46.2	68.2
62.5°	4.5	9.1	18.9	31.8	45.5
65°	3.8	10.6	16.7	21.2	25.8
67.5°	3.0	10.6	14.4	13.6	13.6
70°	3.0	10.6	12.1	11.4	12.1
72.5°	3.0	11.4	11.4	10.6	10.6
75°	3.0	9.8	9.8	9.1	9.1
77.5°	3.0	9.1	9.1	8.3	8.3
80°	3.0	8.3	8.3	7.6	6.8
82.5°	3.0	7.6	7.6	6.8	6.1
85°	2.3	6.8	6.8	6.8	4.5
87.5°	2.3	6.1	6.8	6.1	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)