

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: P1059358

Luminaire Tested: S123RDR-S775D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059358  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S775D850-X4F0-XX-UDD-SVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

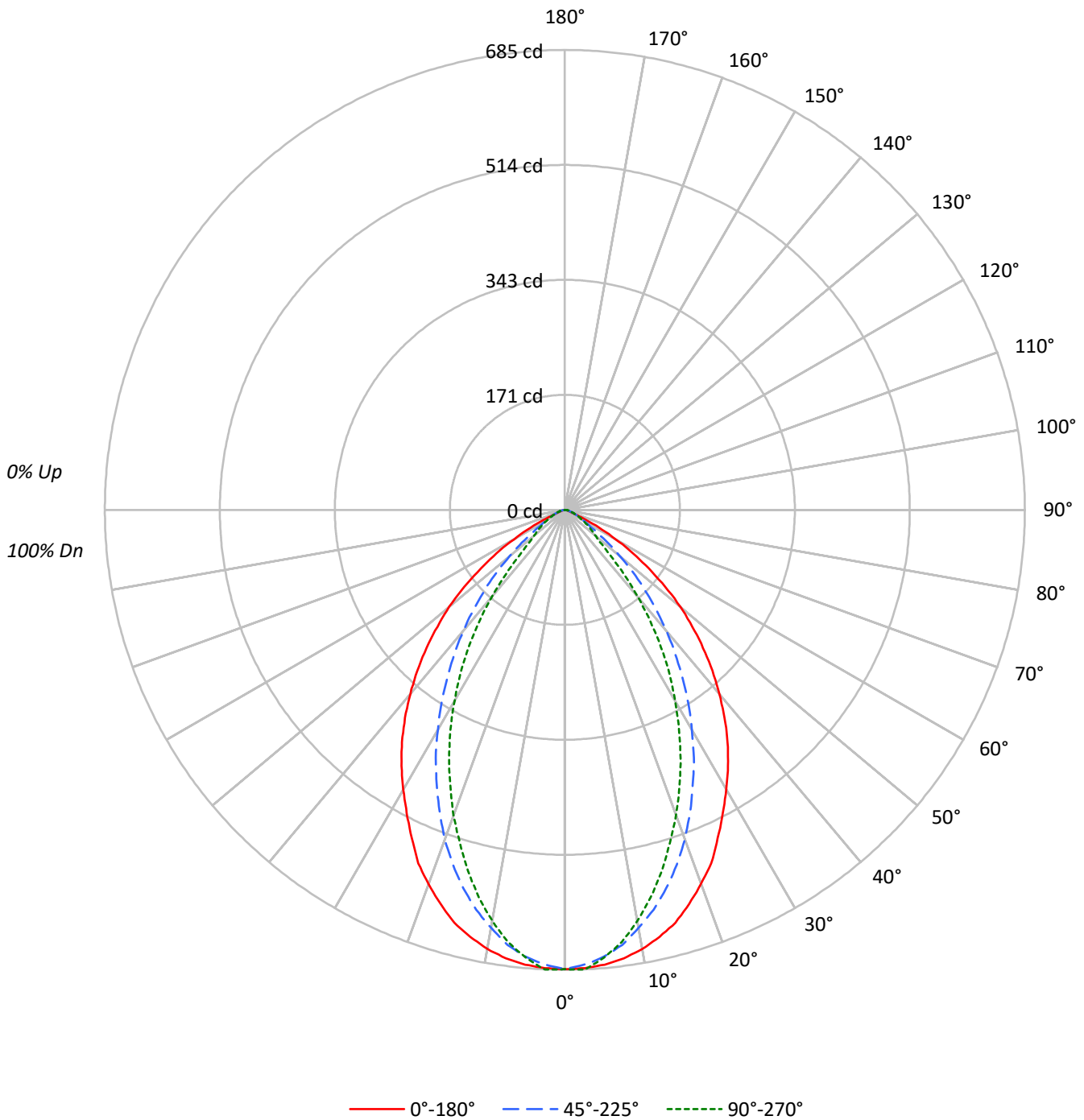
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 883.3 lumens  
Efficiency: N/A  
Efficacy: 34.2 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98  
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91			91	
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82			82	
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73			73	
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66			66	
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60			60	
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55			55	
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50			50	
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46			46	
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42			42	
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39			39	

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

	0°	45°	90°
0°	8034	8034	8034
5°	8015	7877	7890
10°	7918	7539	7413
15°	7739	7095	6772
20°	7411	6525	6048
25°	6985	5846	5284
30°	6521	5127	4451
35°	6058	4372	3584
40°	5488	3604	2598
45°	4837	2797	1566
50°	4101	1955	1065
55°	3122	1171	888
60°	2041	747	698
65°	853	558	558
70°	292	402	436
75°	240	290	336
80°	142	216	284
85°	148	148	283

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4837 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.2	7.2
10°-20°	165.4	18.7
20°-30°	212.1	24.0
30°-40°	199.0	22.5
40°-50°	138.8	15.7
50°-60°	71.8	8.1
60°-70°	24.5	2.8
70°-80°	7.0	0.8
80°-90°	1.5	0.2
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°	440.7	49.9
0°-40°	639.7	72.4
0°-60°	850.3	96.3
0°-90°	883.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	883.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	684	684	684	684	684	
5°	680	679	668	672	669	64
15°	637	621	584	564	557	178
25°	539	505	451	420	408	248
35°	423	371	305	266	250	263
45°	291	238	168	116	94	224
55°	152	114	57	44	43	137
65°	31	26	20	19	20	36
75°	5	5	6	7	7	5
85°	1	1	1	1	2	1
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	684.2	684.2	684.2	684.2	684.2
2.5°	683.2	684.2	677.9	684.2	685.3
5°	680.0	678.9	668.3	671.5	669.4
7.5°	673.6	670.5	653.5	649.3	649.3
10°	664.1	657.8	632.3	624.9	621.7
12.5°	651.4	642.9	610.1	596.3	591.0
15°	636.6	620.7	583.6	564.5	557.1
17.5°	615.4	594.2	554.0	531.7	520.1
20°	593.1	566.7	522.2	495.7	484.0
22.5°	569.8	538.1	487.2	458.6	445.9
25°	539.1	505.2	451.2	420.5	407.8
27.5°	509.5	473.5	416.3	381.3	368.6
30°	480.9	438.5	378.1	344.2	328.3
32.5°	452.3	404.6	342.1	305.0	290.2
35°	422.6	370.7	305.0	265.9	250.0
37.5°	390.8	337.9	270.1	227.7	208.7
40°	358.0	302.9	235.1	187.5	169.5
42.5°	325.2	271.2	200.2	151.5	130.3
45°	291.3	238.3	168.4	116.5	94.3
47.5°	257.4	205.5	137.7	84.7	71.0
50°	224.5	174.8	107.0	62.5	58.3
52.5°	188.5	145.1	80.5	51.9	50.8
55°	152.5	114.4	57.2	44.5	43.4
57.5°	120.7	89.0	41.3	37.1	36.0
60°	86.9	63.6	31.8	30.7	29.7
62.5°	57.2	43.4	25.4	24.4	24.4
65°	30.7	26.5	20.1	19.1	20.1
67.5°	12.7	14.8	14.8	15.9	15.9
70°	8.5	9.5	11.7	12.7	12.7
72.5°	6.4	7.4	8.5	9.5	9.5
75°	5.3	5.3	6.4	7.4	7.4
77.5°	3.2	4.2	4.2	5.3	6.4
80°	2.1	3.2	3.2	4.2	4.2
82.5°	1.1	2.1	2.1	3.2	3.2
85°	1.1	1.1	1.1	1.1	2.1
87.5°	0.0	0.0	0.0	0.0	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)