

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: P1059350

Luminaire Tested: S123RDR-S775D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

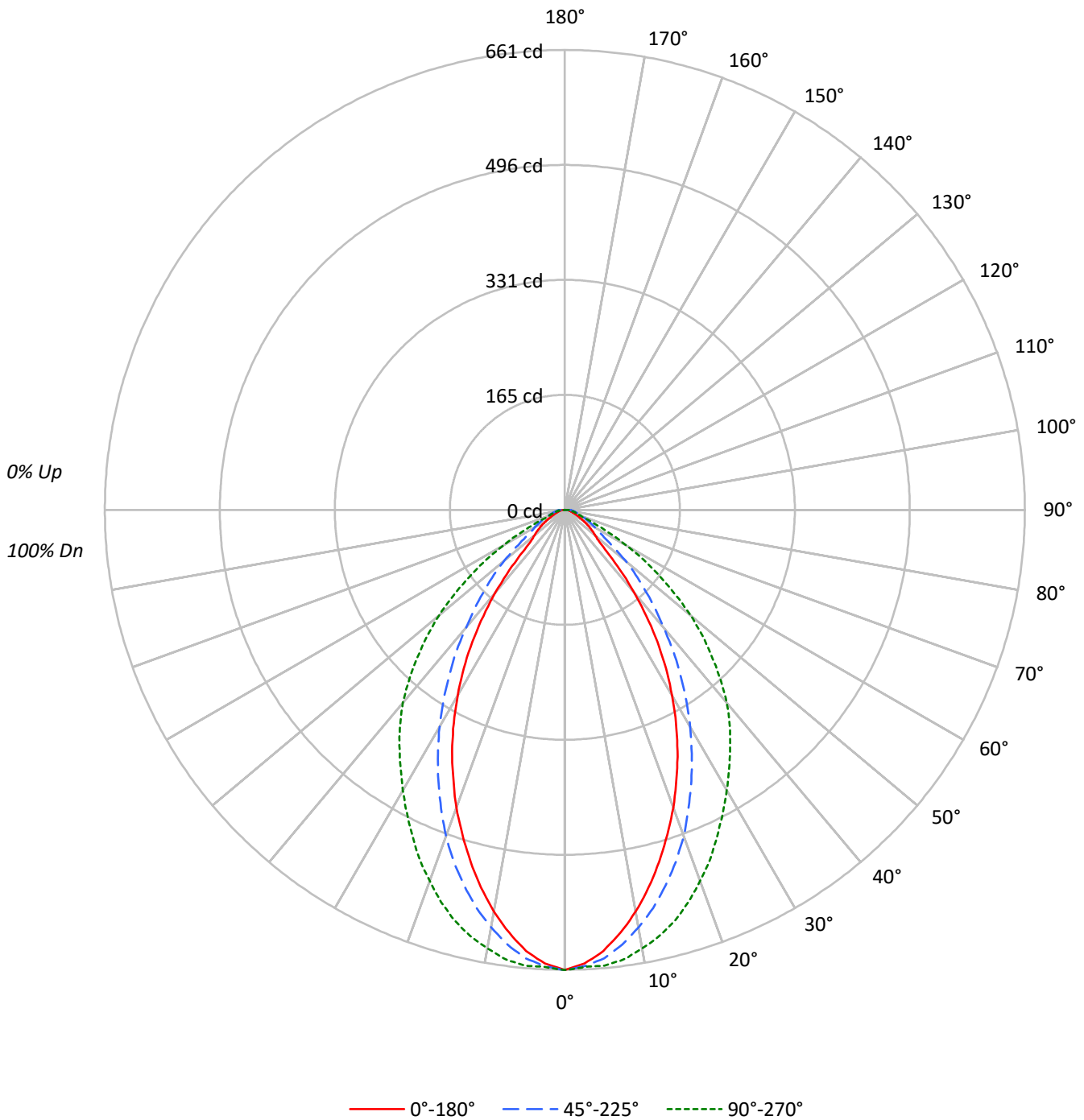
Test Method: LM-79-2019  
Report Number: P1059350  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S775D840-X4F0-XX-UDD-SVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 885.8 lumens  
Efficiency: N/A  
Efficacy: 34.3 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.07 / 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																		
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																												
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71																												
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64																												
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58																												
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52																												
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48																												
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44																												
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40																												
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37																												

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

	0°	45°	90°
0°	7766	7766	7766
5°	7500	7625	7750
10°	6988	7264	7632
15°	6362	6796	7430
20°	5694	6238	7094
25°	4966	5567	6705
30°	4176	4883	6310
35°	3321	4138	5938
40°	2368	3374	5551
45°	1412	2710	4970
50°	1041	2064	4304
55°	870	1404	3419
60°	702	1155	2403
65°	564	992	1286
70°	463	862	797
75°	440	830	744
80°	460	913	717
85°	647	1307	916

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4970 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.8	6.9
10°-20°	157.8	17.8
20°-30°	201.3	22.7
30°-40°	189.4	21.4
40°-50°	136.1	15.4
50°-60°	78.0	8.8
60°-70°	35.7	4.0
70°-80°	17.9	2.0
80°-90°	8.8	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°	419.9	47.4
0°-40°	609.3	68.8
0°-60°	823.4	93.0
0°-90°	885.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	885.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	636	649	647	652	658	59
15°	523	542	559	589	611	146
25°	383	401	430	476	518	175
35°	232	248	289	354	414	143
45°	85	103	163	240	299	71
55°	42	43	69	126	167	38
65°	20	28	36	40	46	20
75°	10	19	18	16	16	11
85°	5	10	10	9	7	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	661.4	661.4	661.4	661.4	661.4
2.5°	652.7	662.3	656.6	656.6	657.5
5°	636.3	648.8	646.9	651.7	657.5
7.5°	613.1	626.6	630.5	642.1	651.7
10°	586.1	601.5	609.2	627.6	640.1
12.5°	556.1	573.5	586.1	609.2	627.6
15°	523.3	541.7	559.0	589.0	611.2
17.5°	489.5	507.9	530.1	564.8	590.9
20°	455.7	474.1	499.2	535.9	567.7
22.5°	419.0	437.4	464.4	505.9	544.6
25°	383.3	400.7	429.7	476.0	517.5
27.5°	345.7	363.0	394.9	445.1	491.5
30°	308.0	325.4	360.1	414.2	465.4
32.5°	270.3	286.8	324.4	384.3	439.3
35°	231.7	248.1	288.7	354.3	414.2
37.5°	192.1	208.6	255.9	327.3	389.1
40°	154.5	172.8	220.1	300.3	362.1
42.5°	117.8	137.1	191.2	271.3	331.2
45°	85.0	103.3	163.2	240.4	299.3
47.5°	64.7	74.3	138.1	209.5	268.4
50°	57.0	57.9	113.0	181.5	235.6
52.5°	49.2	50.2	87.9	154.5	200.8
55°	42.5	43.4	68.6	126.5	167.0
57.5°	35.7	37.7	56.0	100.4	134.2
60°	29.9	33.8	49.2	76.3	102.3
62.5°	24.1	30.9	42.5	56.0	73.4
65°	20.3	28.0	35.7	39.6	46.3
67.5°	16.4	26.1	29.9	28.0	28.0
70°	13.5	23.2	25.1	23.2	23.2
72.5°	11.6	22.2	21.2	19.3	19.3
75°	9.7	19.3	18.3	16.4	16.4
77.5°	8.7	16.4	15.4	14.5	13.5
80°	6.8	13.5	13.5	12.6	10.6
82.5°	5.8	11.6	11.6	10.6	8.7
85°	4.8	9.7	9.7	8.7	6.8
87.5°	3.9	8.7	8.7	7.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)