

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: P1059330

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

Issue Date: 8/7/2025

**Test Information**

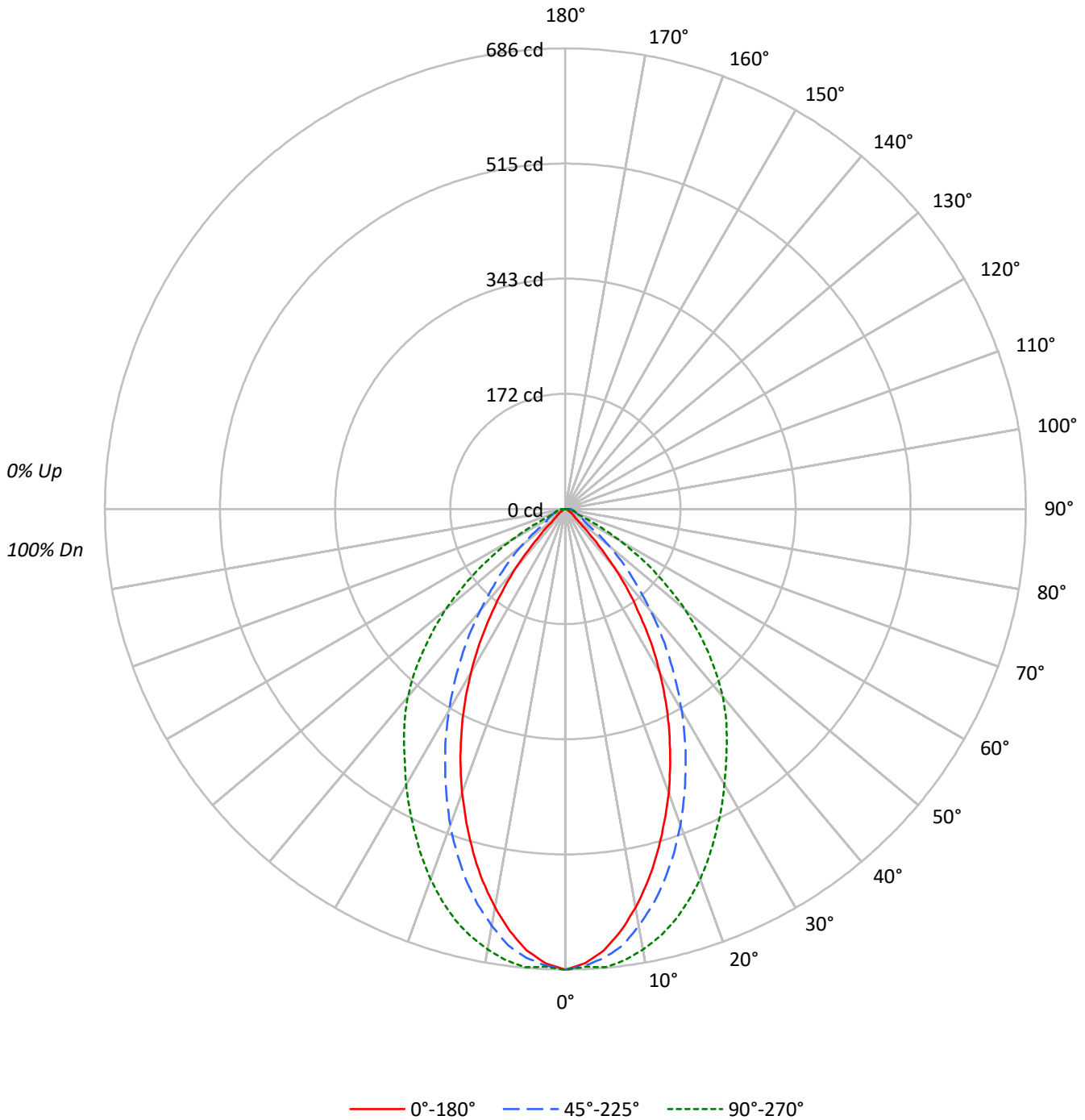
Test Method: LM-79-2019  
Report Number: P1059330  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S775D830-X4F0-XX-UDD-BVL-W  
Description: DEFINE 3 WHITE 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: 823.7 lumens  
Efficiency: N/A  
Efficacy: 31.9 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										
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	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	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81																				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73																				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66																				
5	86	76	69	64	84	75	69	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	65	58	53	63	57	53	62	56	52	61	56	52	50																				
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47																				
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	42	40																				

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

	0°	45°	90°
0°	8056	8056	8056
5°	7780	7907	8077
10°	7182	7514	7945
15°	6444	6949	7705
20°	5622	6264	7334
25°	4742	5490	6880
30°	3814	4694	6430
35°	2791	3865	6009
40°	1741	3012	5596
45°	659	2245	4985
50°	312	1547	4249
55°	240	850	3286
60°	169	721	2161
65°	125	625	903
70°	124	587	587
75°	163	612	612
80°	243	730	669
85°	485	1213	970

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4985 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.0	7.6
10°-20°	161.5	19.6
20°-30°	199.9	24.3
30°-40°	179.2	21.8
40°-50°	117.5	14.3
50°-60°	58.8	7.1
60°-70°	22.9	2.8
70°-80°	12.9	1.6
80°-90°	8.0	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°	424.4	51.5
0°-40°	603.6	73.3
0°-60°	779.9	94.7
0°-90°	823.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	823.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	660	671	671	678	685	61
15°	530	552	572	610	634	148
25°	366	389	424	484	531	167
35°	195	221	270	351	419	121
45°	40	64	135	232	300	38
55°	12	14	42	114	160	11
65°	4	14	22	30	32	5
75°	4	14	14	14	14	4
85°	4	9	9	9	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	686.1	686.1	686.1	686.1	686.1
2.5°	677.1	687.0	680.7	681.6	682.5
5°	660.0	670.8	670.8	678.0	685.2
7.5°	633.8	646.4	655.5	668.1	678.0
10°	602.3	617.6	630.2	652.8	666.3
12.5°	568.0	586.9	603.2	632.9	651.8
15°	530.1	551.8	571.6	609.5	633.8
17.5°	489.6	511.2	537.3	581.5	611.3
20°	449.9	471.5	501.3	550.9	586.9
22.5°	408.4	431.0	462.5	517.5	559.9
25°	366.0	388.6	423.7	484.2	531.0
27.5°	323.7	346.2	385.9	451.7	503.1
30°	281.3	303.8	346.2	416.5	474.2
32.5°	238.9	263.3	307.4	384.1	445.4
35°	194.7	220.9	269.6	350.7	419.2
37.5°	154.2	178.5	233.5	321.9	393.1
40°	113.6	139.7	196.5	293.9	365.1
42.5°	73.9	101.9	163.2	263.3	333.6
45°	39.7	64.0	135.2	231.7	300.2
47.5°	21.6	35.2	109.1	198.3	266.0
50°	17.1	19.8	84.7	169.5	232.6
52.5°	14.4	16.2	60.4	142.5	195.6
55°	11.7	14.4	41.5	113.6	160.5
57.5°	9.9	12.6	32.5	88.4	125.3
60°	7.2	10.8	30.7	64.9	92.0
62.5°	5.4	11.7	27.0	45.1	60.4
65°	4.5	13.5	22.5	29.8	32.5
67.5°	3.6	14.4	19.8	18.9	18.9
70°	3.6	13.5	17.1	16.2	17.1
72.5°	3.6	14.4	15.3	14.4	15.3
75°	3.6	13.5	13.5	13.5	13.5
77.5°	3.6	12.6	12.6	11.7	11.7
80°	3.6	10.8	10.8	10.8	9.9
82.5°	3.6	9.9	9.9	9.9	8.1
85°	3.6	9.0	9.0	9.0	7.2
87.5°	2.7	8.1	9.0	8.1	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)