

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: P1059328

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059328  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)  
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-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

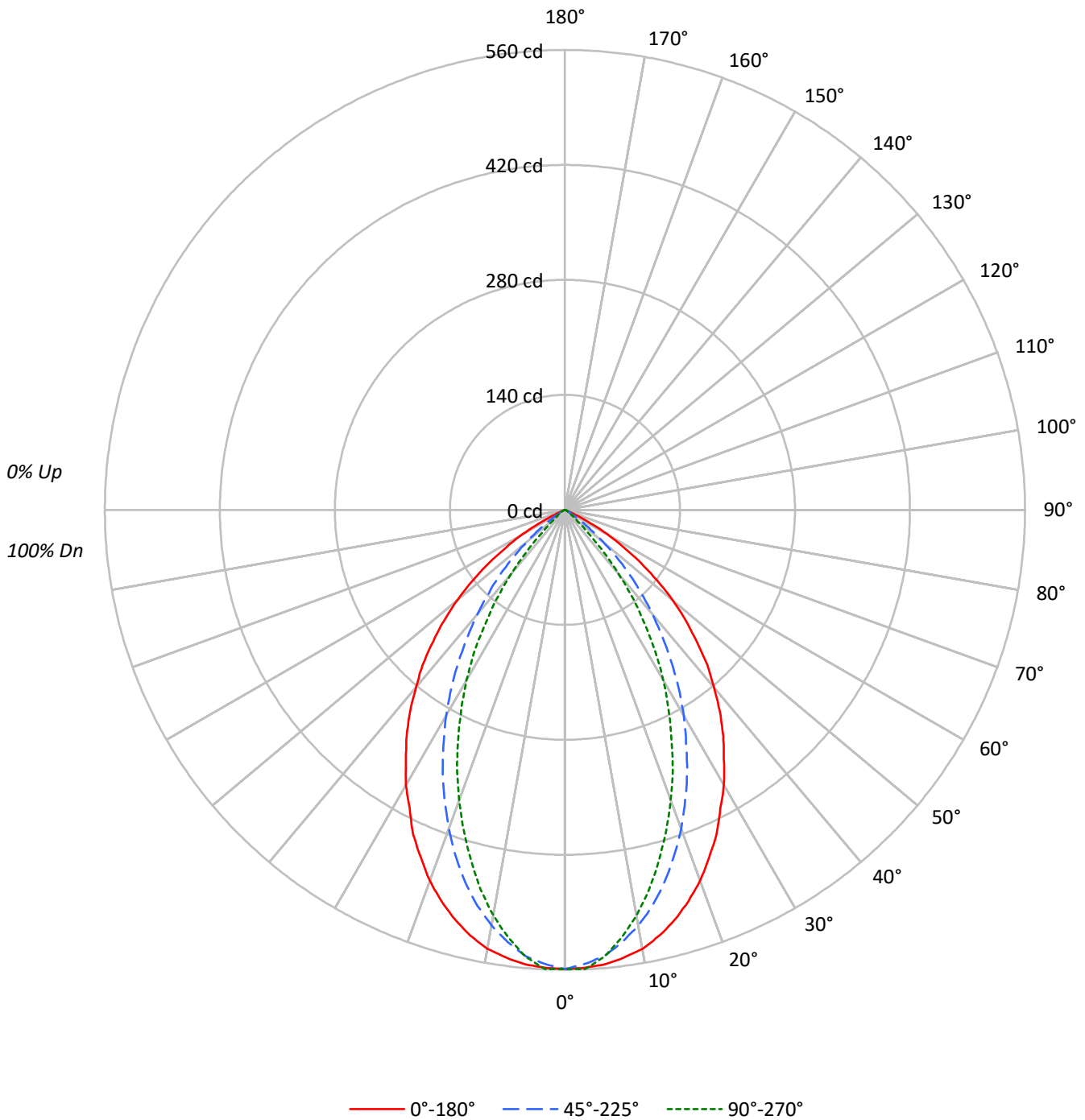
Lumens per Lamp: N/A  
Luminaire Lumens: 637.8 lumens  
Efficiency: N/A  
Efficacy: 24.7 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

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

	0°	45°	90°
0°	6564	6564	6564
5°	6547	6430	6441
10°	6472	6129	5978
15°	6281	5701	5373
20°	6007	5163	4702
25°	5657	4561	3976
30°	5249	3917	3246
35°	4812	3238	2413
40°	4318	2538	1545
45°	3766	1853	643
50°	3124	1102	247
55°	2303	461	184
60°	1395	169	106
65°	375	100	50
70°	0	31	31
75°	0	0	41
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3766 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.5	8.1
10°-20°	132.8	20.8
20°-30°	165.5	26.0
30°-40°	148.0	23.2
40°-50°	93.4	14.6
50°-60°	39.1	6.1
60°-70°	7.4	1.2
70°-80°	0.2	0.0
80°-90°	0.0	0.0
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°	349.8	54.8
0°-40°	497.8	78.0
0°-60°	630.2	98.8
0°-90°	637.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	637.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	555	554	546	547	546	53
15°	517	504	469	449	442	145
25°	437	402	352	321	307	200
35°	336	287	226	185	168	209
45°	227	176	112	59	39	175
55°	112	77	22	9	9	101
65°	14	10	4	2	2	19
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	559.0	559.0	559.0	559.0	559.0
2.5°	558.1	559.0	553.6	559.0	559.9
5°	555.4	554.5	545.5	547.3	546.4
7.5°	550.0	547.3	531.1	527.5	525.7
10°	542.8	535.6	514.0	505.0	501.4
12.5°	531.1	521.2	493.3	478.9	473.5
15°	516.7	504.1	469.0	449.2	442.0
17.5°	499.6	481.6	442.0	420.4	409.6
20°	480.7	455.5	413.2	387.1	376.3
22.5°	458.2	430.3	382.6	354.7	343.0
25°	436.6	401.5	352.0	321.3	306.9
27.5°	409.6	372.7	319.5	288.0	272.7
30°	387.1	344.8	288.9	253.8	239.4
32.5°	360.1	315.9	257.4	218.7	205.2
35°	335.7	287.1	225.9	185.4	168.3
37.5°	309.6	259.2	194.4	152.1	135.9
40°	281.7	231.3	165.6	118.8	100.8
42.5°	256.5	203.4	136.8	88.2	70.2
45°	226.8	176.4	111.6	59.4	38.7
47.5°	199.8	151.2	84.6	33.3	20.7
50°	171.0	125.1	60.3	17.1	13.5
52.5°	141.3	99.9	39.6	11.7	10.8
55°	112.5	77.4	22.5	9.0	9.0
57.5°	84.6	55.8	11.7	7.2	6.3
60°	59.4	36.9	7.2	5.4	4.5
62.5°	34.2	21.6	5.4	3.6	3.6
65°	13.5	9.9	3.6	1.8	1.8
67.5°	0.9	2.7	1.8	0.9	0.9
70°	0.0	0.0	0.9	0.9	0.9
72.5°	0.0	0.0	0.9	0.9	0.9
75°	0.0	0.0	0.0	0.0	0.9
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)