

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: P1059337

Luminaire Tested: S123RDR-S775D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059337  
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-S775D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

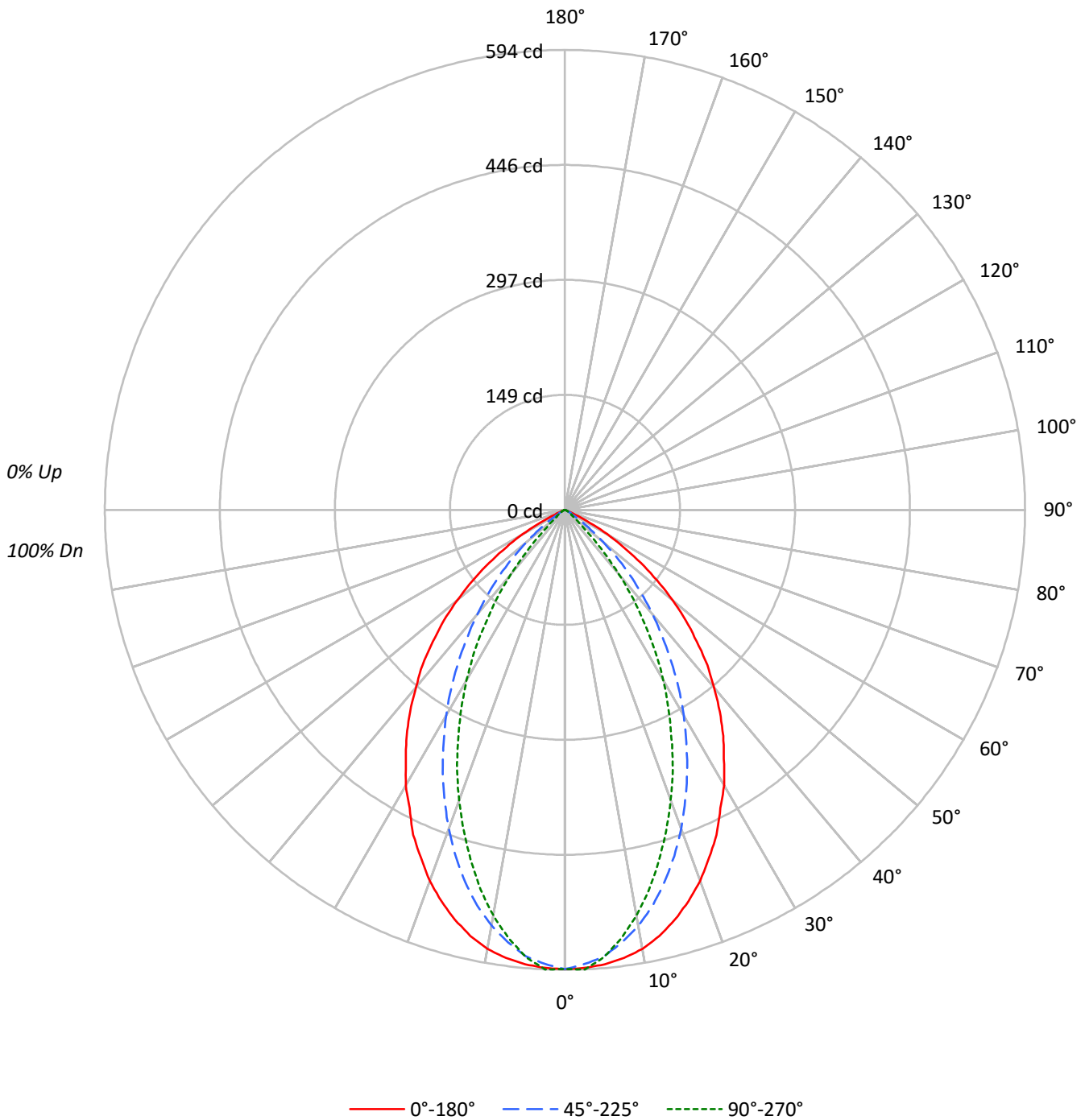
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 676.7 lumens  
Efficiency: N/A  
Efficacy: 26.2 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°	6964	6964	6964
5°	6945	6821	6833
10°	6867	6502	6342
15°	6664	6049	5700
20°	6373	5477	4988
25°	6001	4838	4220
30°	5569	4157	3444
35°	5106	3436	2560
40°	4582	2693	1640
45°	3997	1966	683
50°	3316	1169	261
55°	2444	489	197
60°	1480	178	113
65°	397	106	53
70°	0	34	34
75°	0	0	45
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3997 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.6	8.1
10°-20°	140.9	20.8
20°-30°	175.6	25.9
30°-40°	157.0	23.2
40°-50°	99.1	14.6
50°-60°	41.5	6.1
60°-70°	7.8	1.2
70°-80°	0.3	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°	371.1	54.8
0°-40°	528.1	78.0
0°-60°	668.7	98.8
0°-90°	676.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	676.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	593	593	593	593	593	
5°	589	588	579	581	580	56
15°	548	535	498	476	469	154
25°	463	426	373	341	326	212
35°	356	305	240	197	179	222
45°	241	187	118	63	41	186
55°	119	82	24	10	10	107
65°	14	10	4	2	2	20
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°	593.1	593.1	593.1	593.1	593.1
2.5°	592.1	593.1	587.3	593.1	594.0
5°	589.2	588.3	578.7	580.6	579.7
7.5°	583.5	580.6	563.5	559.6	557.7
10°	575.9	568.2	545.3	535.8	531.9
12.5°	563.5	552.9	523.3	508.1	502.3
15°	548.2	534.8	497.6	476.5	468.9
17.5°	530.0	510.9	468.9	446.0	434.5
20°	510.0	483.2	438.3	410.7	399.2
22.5°	486.1	456.5	405.9	376.3	363.9
25°	463.2	425.9	373.4	340.9	325.7
27.5°	434.5	395.4	339.0	305.6	289.4
30°	410.7	365.8	306.6	269.3	254.0
32.5°	382.0	335.2	273.1	232.1	217.7
35°	356.2	304.6	239.7	196.7	178.6
37.5°	328.5	275.0	206.3	161.4	144.2
40°	298.9	245.4	175.7	126.1	107.0
42.5°	272.2	215.8	145.2	93.6	74.5
45°	240.7	187.2	118.4	63.0	41.1
47.5°	212.0	160.4	89.8	35.3	22.0
50°	181.5	132.7	64.0	18.1	14.3
52.5°	149.9	106.0	42.0	12.4	11.5
55°	119.4	82.1	23.9	9.6	9.6
57.5°	89.8	59.2	12.4	7.6	6.7
60°	63.0	39.2	7.6	5.7	4.8
62.5°	36.3	22.9	5.7	3.8	3.8
65°	14.3	10.5	3.8	1.9	1.9
67.5°	1.0	2.9	1.9	1.0	1.0
70°	0.0	0.0	1.0	1.0	1.0
72.5°	0.0	0.0	1.0	1.0	1.0
75°	0.0	0.0	0.0	0.0	1.0
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)