

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: P1059340

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

Issue Date: 8/7/2025

**Test Information**

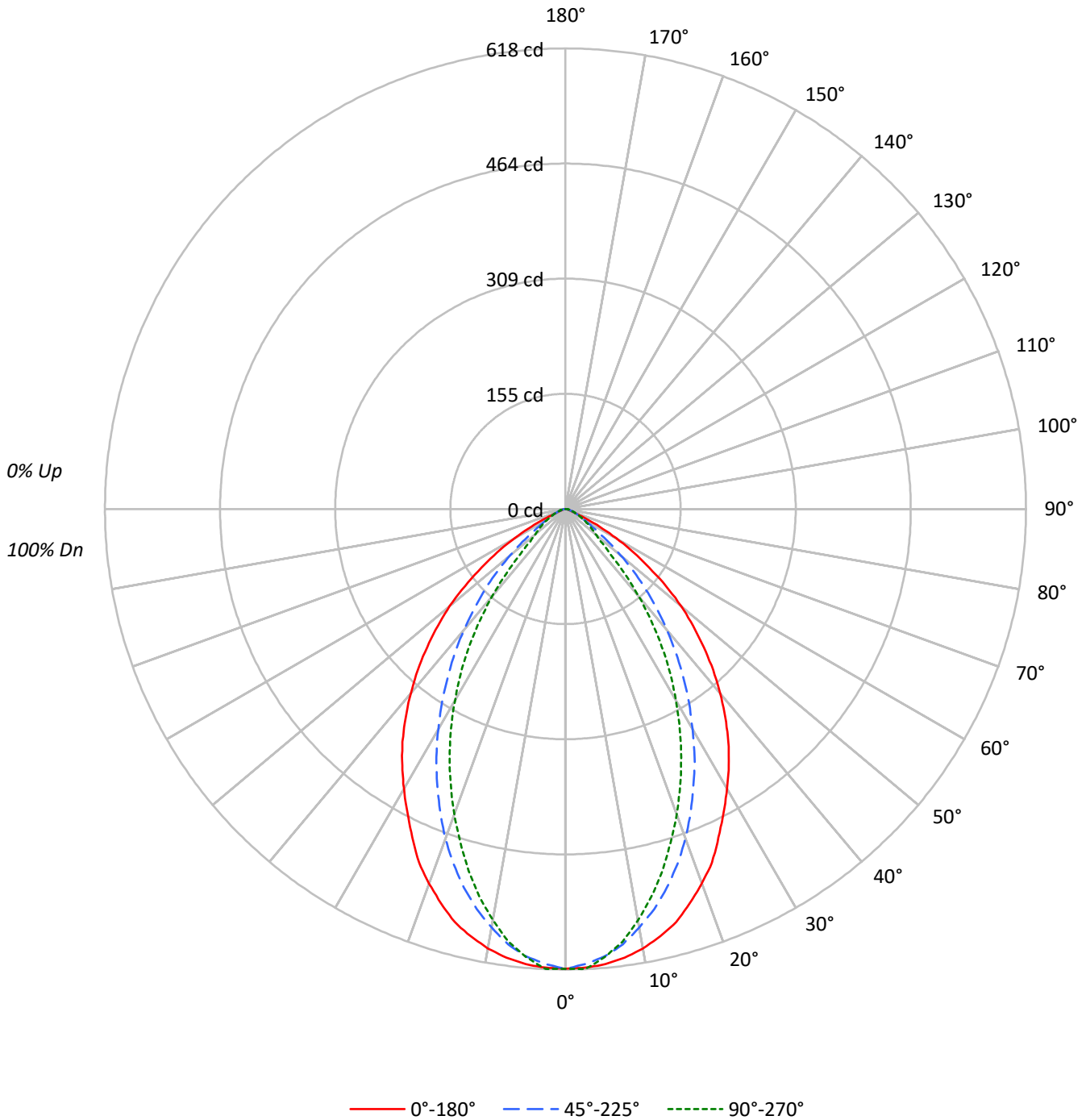
Test Method: LM-79-2019  
Report Number: P1059340  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S775D835-X4F0-XX-UDD-SVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 796.5 lumens  
Efficiency: N/A  
Efficacy: 30.9 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°	7245	7245	7245
5°	7228	7104	7115
10°	7140	6799	6684
15°	6978	6397	6108
20°	6683	5884	5455
25°	6298	5272	4764
30°	5879	4624	4015
35°	5463	3944	3231
40°	4948	3250	2342
45°	4361	2522	1412
50°	3699	1763	959
55°	2815	1056	803
60°	1839	674	627
65°	770	503	503
70°	261	360	395
75°	218	259	304
80°	128	196	257
85°	135	135	256

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4361 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.0	7.2
10°-20°	149.1	18.7
20°-30°	191.2	24.0
30°-40°	179.5	22.5
40°-50°	125.2	15.7
50°-60°	64.7	8.1
60°-70°	22.1	2.8
70°-80°	6.3	0.8
80°-90°	1.3	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°	397.3	49.9
0°-40°	576.8	72.4
0°-60°	766.7	96.3
0°-90°	796.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	796.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	617	617	617	617	617	
5°	613	612	603	606	604	58
15°	574	560	526	509	502	161
25°	486	456	407	379	368	223
35°	381	334	275	240	225	237
45°	263	215	152	105	85	202
55°	138	103	52	40	39	124
65°	28	24	18	17	18	33
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°	617.0	617.0	617.0	617.0	617.0
2.5°	616.0	617.0	611.2	617.0	617.9
5°	613.2	612.2	602.7	605.5	603.6
7.5°	607.4	604.6	589.3	585.5	585.5
10°	598.8	593.1	570.2	563.5	560.6
12.5°	587.4	579.7	550.1	537.7	532.9
15°	574.0	559.7	526.2	509.1	502.4
17.5°	554.9	535.8	499.5	479.4	468.9
20°	534.8	511.0	470.9	447.0	436.5
22.5°	513.8	485.2	439.3	413.5	402.1
25°	486.1	455.6	406.9	379.2	367.7
27.5°	459.4	426.9	375.3	343.8	332.4
30°	433.6	395.4	341.0	310.4	296.1
32.5°	407.8	364.8	308.5	275.1	261.7
35°	381.1	334.3	275.1	239.7	225.4
37.5°	352.4	304.7	243.5	205.3	188.2
40°	322.8	273.2	212.0	169.0	152.8
42.5°	293.2	244.5	180.5	136.6	117.5
45°	262.6	214.9	151.9	105.1	85.0
47.5°	232.1	185.3	124.2	76.4	64.0
50°	202.5	157.6	96.5	56.3	52.5
52.5°	170.0	130.8	72.6	46.8	45.8
55°	137.5	103.1	51.6	40.1	39.2
57.5°	108.9	80.2	37.2	33.4	32.5
60°	78.3	57.3	28.7	27.7	26.7
62.5°	51.6	39.2	22.9	22.0	22.0
65°	27.7	23.9	18.1	17.2	18.1
67.5°	11.5	13.4	13.4	14.3	14.3
70°	7.6	8.6	10.5	11.5	11.5
72.5°	5.7	6.7	7.6	8.6	8.6
75°	4.8	4.8	5.7	6.7	6.7
77.5°	2.9	3.8	3.8	4.8	5.7
80°	1.9	2.9	2.9	3.8	3.8
82.5°	1.0	1.9	1.9	2.9	2.9
85°	1.0	1.0	1.0	1.0	1.9
87.5°	0.0	0.0	0.0	0.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)