

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059367

Luminaire Tested: S123RDRP-S775D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059367  
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: S123RDRP-S775D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

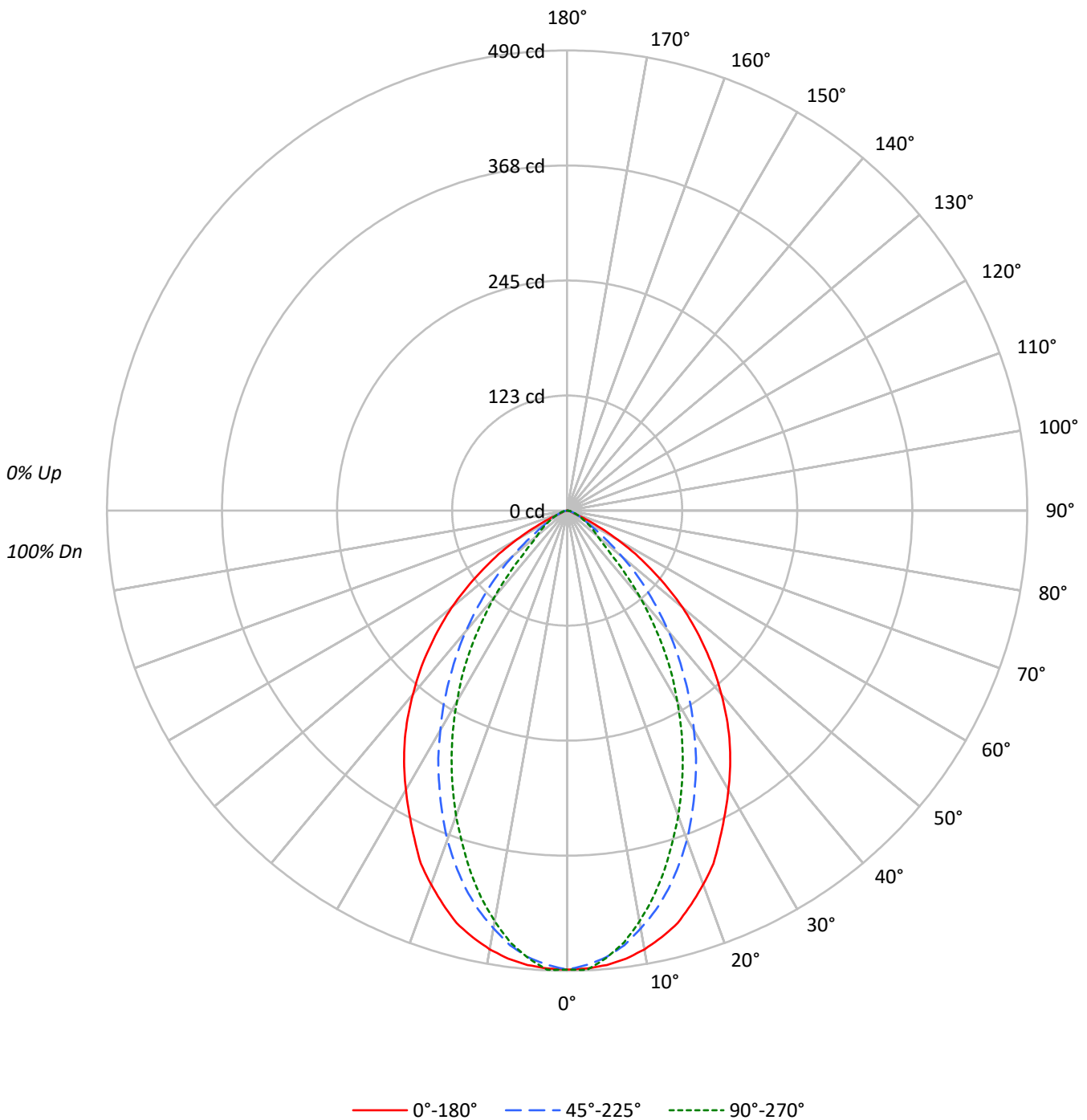
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 631.0 lumens  
Efficiency: N/A  
Efficacy: 24.5 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 (A<sub>in</sub>): 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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	5740	5740	5740
5°	5725	5627	5637
10°	5657	5386	5295
15°	5528	5068	4838
20°	5295	4661	4321
25°	4989	4176	3774
30°	4658	3662	3180
35°	4328	3124	2560
40°	3920	2575	1856
45°	3456	1998	1118
50°	2930	1396	760
55°	2229	837	635
60°	1456	533	498
65°	608	400	400
70°	209	285	312
75°	172	204	240
80°	101	156	203
85°	108	108	202

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3456 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.1	7.2
10°-20°	118.1	18.7
20°-30°	151.5	24.0
30°-40°	142.2	22.5
40°-50°	99.2	15.7
50°-60°	51.3	8.1
60°-70°	17.5	2.8
70°-80°	5.0	0.8
80°-90°	1.1	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°	314.8	49.9
0°-40°	456.9	72.4
0°-60°	607.4	96.3
0°-90°	631.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	631.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	489	489	489	489	489	
5°	486	485	477	480	478	46
15°	455	443	417	403	398	127
25°	385	361	322	300	291	177
35°	302	265	218	190	179	188
45°	208	170	120	83	67	160
55°	109	82	41	32	31	98
65°	22	19	14	14	14	26
75°	4	4	4	5	5	4
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°	488.8	488.8	488.8	488.8	488.8
2.5°	488.0	488.8	484.2	488.8	489.5
5°	485.7	485.0	477.4	479.7	478.2
7.5°	481.2	478.9	466.8	463.8	463.8
10°	474.4	469.8	451.7	446.4	444.1
12.5°	465.3	459.3	435.8	426.0	422.2
15°	454.7	443.4	416.9	403.3	398.0
17.5°	439.6	424.4	395.7	379.8	371.5
20°	423.7	404.8	373.0	354.1	345.8
22.5°	407.0	384.4	348.0	327.6	318.5
25°	385.1	360.9	322.3	300.4	291.3
27.5°	363.9	338.2	297.3	272.4	263.3
30°	343.5	313.2	270.1	245.9	234.5
32.5°	323.1	289.0	244.4	217.9	207.3
35°	301.9	264.8	217.9	189.9	178.6
37.5°	279.2	241.4	192.9	162.7	149.0
40°	255.7	216.4	168.0	133.9	121.1
42.5°	232.3	193.7	143.0	108.2	93.1
45°	208.1	170.2	120.3	83.2	67.3
47.5°	183.9	146.8	98.4	60.5	50.7
50°	160.4	124.8	76.4	44.6	41.6
52.5°	134.7	103.7	57.5	37.1	36.3
55°	108.9	81.7	40.9	31.8	31.0
57.5°	86.3	63.6	29.5	26.5	25.7
60°	62.0	45.4	22.7	21.9	21.2
62.5°	40.9	31.0	18.2	17.4	17.4
65°	21.9	18.9	14.4	13.6	14.4
67.5°	9.1	10.6	10.6	11.3	11.3
70°	6.1	6.8	8.3	9.1	9.1
72.5°	4.5	5.3	6.1	6.8	6.8
75°	3.8	3.8	4.5	5.3	5.3
77.5°	2.3	3.0	3.0	3.8	4.5
80°	1.5	2.3	2.3	3.0	3.0
82.5°	0.8	1.5	1.5	2.3	2.3
85°	0.8	0.8	0.8	0.8	1.5
87.5°	0.0	0.0	0.0	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0

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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	12.41	13.67	12.77	13.98	14.29	5.91	7.17	6.28	7.48	7.80
	3H	12.36	13.47	12.74	13.80	14.17	6.68	7.79	7.06	8.12	8.49
	4H	12.31	13.34	12.71	13.69	14.07	6.88	7.91	7.29	8.27	8.65
	6H	12.24	13.18	12.65	13.55	13.95	7.03	7.97	7.44	8.34	8.73
	8H	12.20	13.09	12.63	13.48	13.88	7.06	7.95	7.49	8.35	8.75
	12H	12.15	13.00	12.59	13.39	13.82	7.08	7.93	7.51	8.31	8.75
4H	2H	12.25	13.28	12.66	13.64	14.02	6.17	7.20	6.57	7.55	7.93
	3H	12.24	13.07	12.65	13.48	13.88	7.07	7.91	7.49	8.31	8.72
	4H	12.19	12.93	12.62	13.35	13.80	7.35	8.09	7.78	8.51	8.95
	6H	12.13	12.77	12.60	13.22	13.69	7.56	8.20	8.02	8.64	9.11
	8H	12.08	12.67	12.55	13.12	13.59	7.62	8.22	8.09	8.67	9.14
	12H	12.03	12.56	12.52	13.04	13.52	7.66	8.19	8.15	8.67	9.15
8H	4H	12.07	12.67	12.55	13.12	13.59	7.33	7.92	7.80	8.37	8.84
	6H	12.01	12.50	12.52	12.99	13.48	7.60	8.08	8.10	8.58	9.06
	8H	11.96	12.40	12.49	12.91	13.41	7.71	8.14	8.23	8.66	9.15
	12H	11.93	12.31	12.44	12.81	13.38	7.78	8.17	8.30	8.66	9.24
12H	4H	12.03	12.55	12.52	13.04	13.51	7.29	7.82	7.78	8.30	8.78
	6H	11.95	12.39	12.48	12.91	13.40	7.56	7.99	8.08	8.51	9.00
	8H	11.92	12.31	12.44	12.81	13.38	7.70	8.08	8.22	8.58	9.15