

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: P1059377

Luminaire Tested: S123RDRP-S775D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059377  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S775D930-X4F0-XX-UDD-SVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

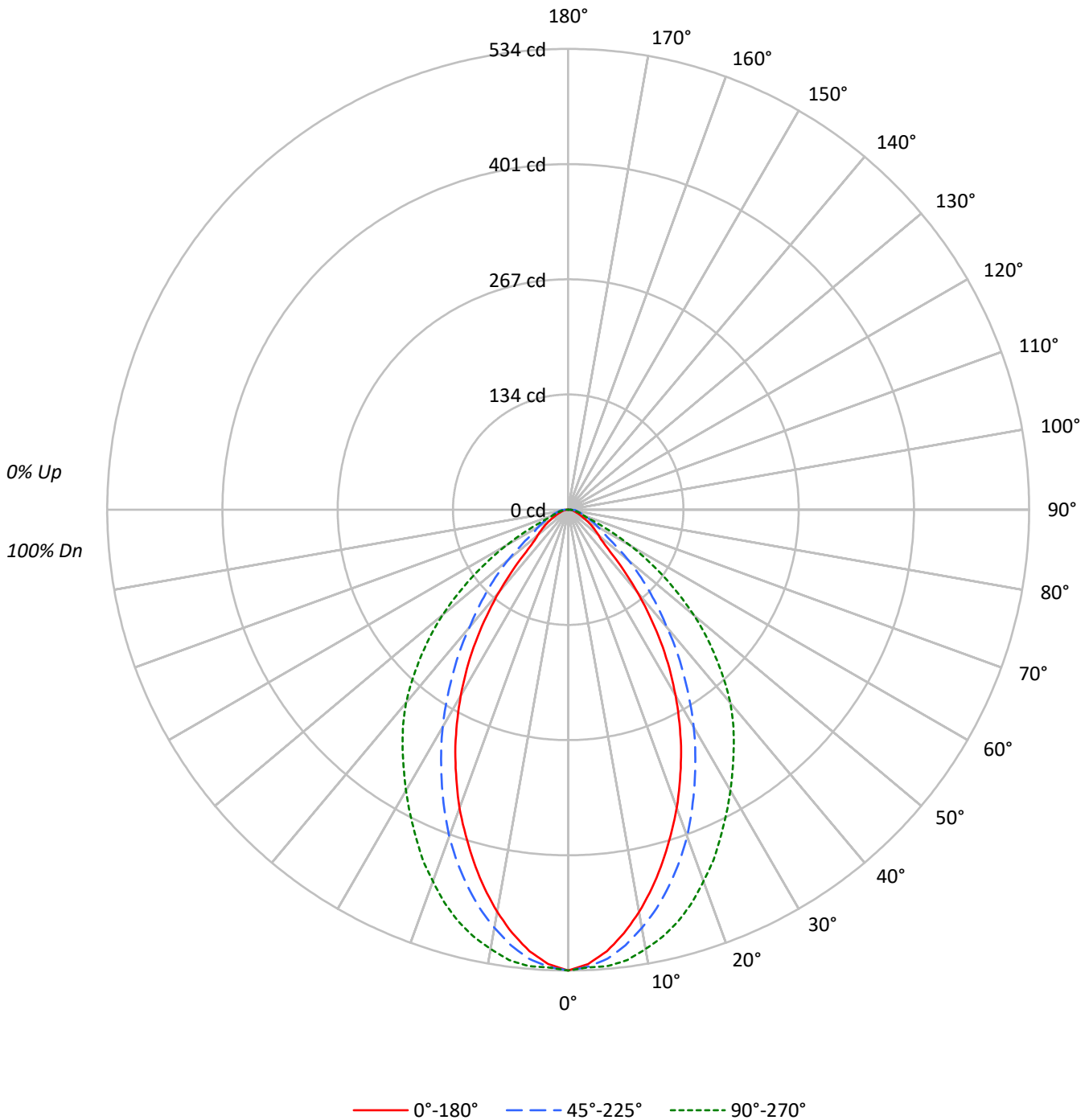
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 715.1 lumens  
Efficiency: N/A  
Efficacy: 27.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.07 / 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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	6270	6270	6270
5°	6055	6157	6257
10°	5642	5865	6162
15°	5136	5486	5998
20°	4597	5036	5727
25°	4010	4495	5413
30°	3372	3943	5094
35°	2682	3341	4794
40°	1911	2724	4481
45°	1139	2187	4012
50°	840	1666	3475
55°	702	1132	2762
60°	568	935	1940
65°	456	800	1039
70°	374	697	642
75°	354	671	603
80°	372	737	582
85°	525	1051	741

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4012 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.0	6.9
10°-20°	127.4	17.8
20°-30°	162.5	22.7
30°-40°	152.9	21.4
40°-50°	109.9	15.4
50°-60°	63.0	8.8
60°-70°	28.8	4.0
70°-80°	14.5	2.0
80°-90°	7.1	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°	339.0	47.4
0°-40°	491.9	68.8
0°-60°	664.8	93.0
0°-90°	715.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	715.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	514	524	522	526	531	48
15°	422	437	451	476	493	118
25°	310	324	347	384	418	141
35°	187	200	233	286	334	116
45°	69	83	132	194	242	57
55°	34	35	55	102	135	31
65°	16	23	29	32	37	16
75°	8	16	15	13	13	9
85°	4	8	8	7	6	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	534.0	534.0	534.0	534.0	534.0
2.5°	526.9	534.7	530.1	530.1	530.8
5°	513.7	523.8	522.3	526.2	530.8
7.5°	495.0	505.9	509.0	518.4	526.2
10°	473.2	485.6	491.9	506.7	516.8
12.5°	449.0	463.0	473.2	491.9	506.7
15°	422.5	437.3	451.3	475.5	493.4
17.5°	395.2	410.0	427.9	456.0	477.1
20°	367.9	382.7	403.0	432.6	458.3
22.5°	338.3	353.1	374.9	408.5	439.6
25°	309.5	323.5	346.9	384.3	417.8
27.5°	279.1	293.1	318.8	359.3	396.8
30°	248.7	262.7	290.8	334.4	375.7
32.5°	218.3	231.5	261.9	310.2	354.7
35°	187.1	200.3	233.1	286.1	334.4
37.5°	155.1	168.4	206.6	264.3	314.1
40°	124.7	139.5	177.7	242.4	292.3
42.5°	95.1	110.7	154.3	219.0	267.4
45°	68.6	83.4	131.7	194.1	241.6
47.5°	52.2	60.0	111.5	169.2	216.7
50°	46.0	46.8	91.2	146.5	190.2
52.5°	39.8	40.5	70.9	124.7	162.1
55°	34.3	35.1	55.3	102.1	134.9
57.5°	28.8	30.4	45.2	81.1	108.4
60°	24.2	27.3	39.8	61.6	82.6
62.5°	19.5	24.9	34.3	45.2	59.2
65°	16.4	22.6	28.8	32.0	37.4
67.5°	13.3	21.0	24.2	22.6	22.6
70°	10.9	18.7	20.3	18.7	18.7
72.5°	9.4	17.9	17.1	15.6	15.6
75°	7.8	15.6	14.8	13.3	13.3
77.5°	7.0	13.3	12.5	11.7	10.9
80°	5.5	10.9	10.9	10.1	8.6
82.5°	4.7	9.4	9.4	8.6	7.0
85°	3.9	7.8	7.8	7.0	5.5
87.5°	3.1	7.0	7.0	6.2	3.9
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	6.36	7.68	6.73	7.99	8.31	13.59	14.91	13.95	15.22	15.53
	3H	7.76	8.93	8.14	9.26	9.62	13.82	14.99	14.20	15.32	15.69
	4H	8.32	9.41	8.73	9.76	10.15	13.93	15.02	14.33	15.37	15.76
	6H	8.79	9.79	9.20	10.16	10.55	14.04	15.04	14.45	15.41	15.80
	8H	8.97	9.92	9.40	10.31	10.72	14.09	15.04	14.52	15.43	15.83
	12H	9.17	10.07	9.60	10.46	10.89	14.14	15.05	14.57	15.43	15.86
4H	2H	7.43	8.52	7.84	8.87	9.26	13.55	14.64	13.95	14.99	15.37
	3H	9.12	10.02	9.54	10.42	10.82	13.92	14.81	14.33	15.21	15.62
	4H	9.96	10.76	10.39	11.18	11.62	14.10	14.90	14.54	15.32	15.76
	6H	10.62	11.31	11.08	11.76	12.22	14.32	15.01	14.79	15.46	15.93
	8H	10.88	11.52	11.35	11.97	12.44	14.42	15.07	14.89	15.52	15.99
	12H	11.13	11.70	11.62	12.19	12.66	14.54	15.11	15.03	15.60	16.07
8H	4H	10.39	11.04	10.86	11.49	11.96	14.15	14.79	14.62	15.24	15.71
	6H	11.35	11.88	11.85	12.37	12.86	14.48	15.01	14.98	15.50	15.99
	8H	11.82	12.29	12.34	12.81	13.30	14.67	15.15	15.19	15.66	16.15
	12H	12.30	12.72	12.81	13.21	13.78	14.90	15.32	15.42	15.82	16.39
12H	4H	10.45	11.03	10.94	11.51	11.98	14.14	14.71	14.63	15.19	15.67
	6H	11.50	11.97	12.02	12.49	12.98	14.51	14.98	15.03	15.50	15.99
	8H	12.09	12.52	12.61	13.01	13.58	14.77	15.19	15.28	15.68	16.25