

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: P1059333

Luminaire Tested: S123RDRP-S775D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059333  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S775D830-X4F0-XX-UDD-SVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

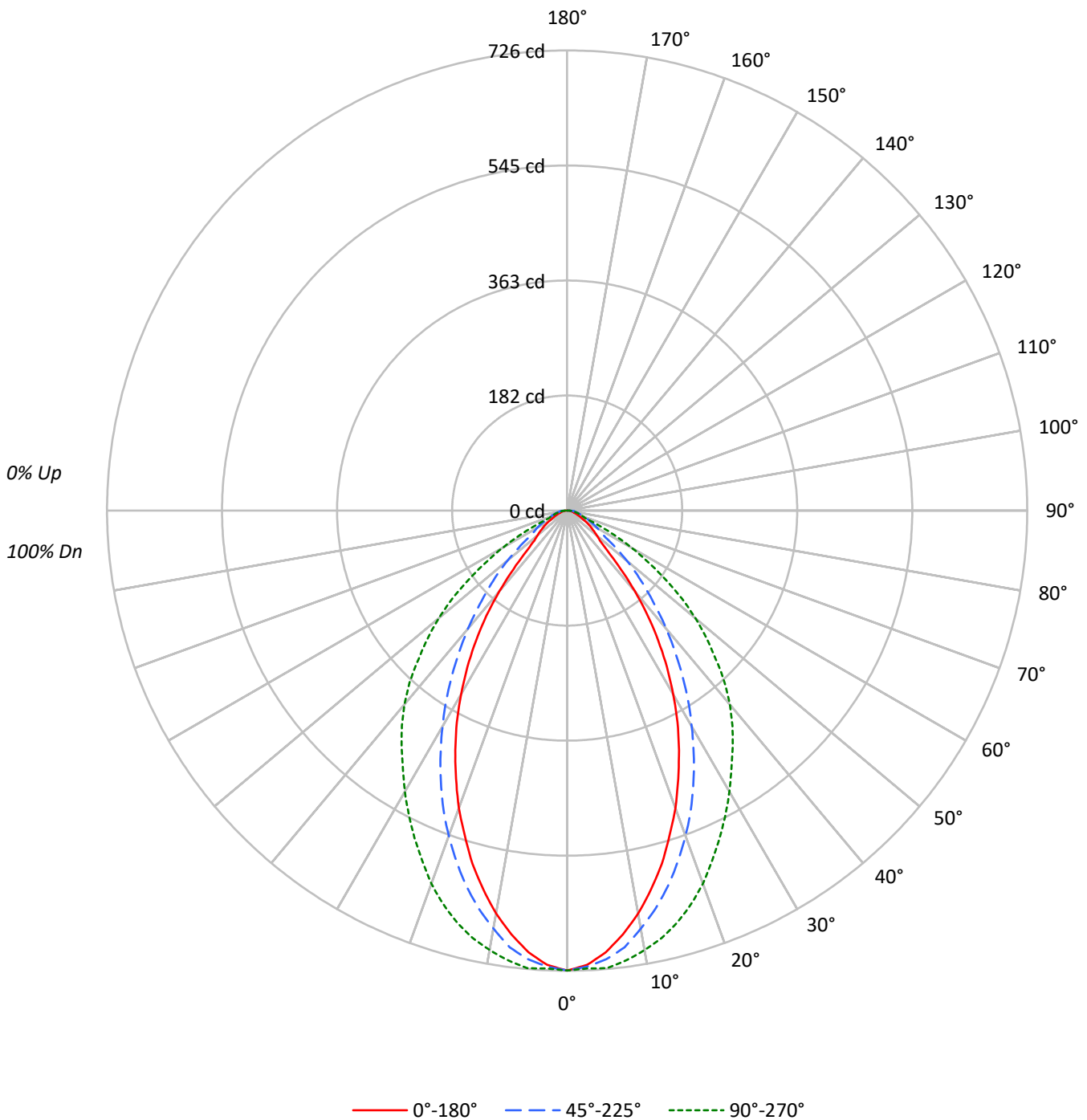
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 974.0 lumens  
Efficiency: N/A  
Efficacy: 37.8 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.08 / 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	102	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	90	81	74	68	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	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	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	55	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	49	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	8520	8520	8520
5°	8245	8373	8542
10°	7695	7985	8394
15°	7013	7462	8174
20°	6241	6825	7829
25°	5407	6108	7381
30°	4534	5329	6942
35°	3592	4536	6525
40°	2543	3731	6121
45°	1496	2949	5508
50°	1120	2240	4825
55°	942	1513	3875
60°	761	1292	2752
65°	600	1103	1453
70°	525	958	896
75°	490	898	857
80°	487	974	852
85°	606	1455	1091

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5508 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.8	6.9
10°-20°	173.6	17.8
20°-30°	221.0	22.7
30°-40°	207.9	21.3
40°-50°	149.7	15.4
50°-60°	86.5	8.9
60°-70°	39.5	4.1
70°-80°	19.7	2.0
80°-90°	9.3	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°	461.3	47.4
0°-40°	669.2	68.7
0°-60°	905.5	93.0
0°-90°	974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	974.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	700	711	710	718	725	65
15°	577	598	614	648	672	161
25°	417	439	471	524	570	191
35°	251	272	316	389	455	155
45°	90	113	178	267	332	76
55°	46	48	74	141	189	41
65°	22	31	40	44	52	22
75°	11	21	20	19	19	12
85°	4	10	11	10	8	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	725.6	725.6	725.6	725.6	725.6
2.5°	717.5	726.5	720.2	721.1	722.9
5°	699.5	711.2	710.3	717.5	724.7
7.5°	674.2	687.7	695.0	705.8	715.7
10°	645.4	660.7	669.7	689.6	704.0
12.5°	612.0	631.9	643.6	669.7	690.5
15°	576.9	597.6	613.8	648.1	672.4
17.5°	537.2	559.8	580.5	621.0	650.8
20°	499.4	521.0	546.2	590.4	626.5
22.5°	457.9	481.3	510.2	557.0	597.6
25°	417.3	439.0	471.4	523.7	569.7
27.5°	376.8	398.4	432.7	490.3	540.8
30°	334.4	356.9	393.0	457.0	512.0
32.5°	292.9	314.6	355.1	424.5	482.2
35°	250.6	272.2	316.4	389.4	455.2
37.5°	209.1	231.7	278.5	360.5	428.2
40°	165.9	190.2	243.4	330.8	399.3
42.5°	125.3	151.4	208.2	300.2	367.8
45°	90.1	112.7	177.6	266.8	331.7
47.5°	70.3	82.0	149.6	232.6	298.4
50°	61.3	63.1	122.6	201.0	264.1
52.5°	53.2	55.0	96.4	171.3	228.0
55°	46.0	47.8	73.9	140.6	189.3
57.5°	38.8	41.5	61.3	111.8	152.3
60°	32.4	36.1	55.0	85.6	117.2
62.5°	26.1	32.4	46.9	63.1	83.8
65°	21.6	30.6	39.7	44.2	52.3
67.5°	18.0	27.9	33.4	31.5	30.6
70°	15.3	25.2	27.9	25.2	26.1
72.5°	12.6	23.4	23.4	21.6	21.6
75°	10.8	20.7	19.8	18.9	18.9
77.5°	9.0	18.0	17.1	16.2	15.3
80°	7.2	14.4	14.4	13.5	12.6
82.5°	6.3	11.7	11.7	11.7	9.9
85°	4.5	9.9	10.8	9.9	8.1
87.5°	3.6	9.0	9.0	8.1	5.4
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	7.42	8.74	7.79	9.05	9.37	14.78	16.10	15.14	16.41	16.72
	3H	8.80	9.97	9.18	10.30	10.67	15.01	16.18	15.39	16.51	16.87
	4H	9.35	10.45	9.76	10.80	11.18	15.12	16.21	15.52	16.56	16.95
	6H	9.79	10.79	10.20	11.16	11.55	15.24	16.24	15.65	16.61	17.00
	8H	9.96	10.91	10.39	11.30	11.71	15.29	16.24	15.72	16.63	17.03
	12H	10.12	11.03	10.55	11.41	11.84	15.35	16.25	15.78	16.64	17.07
4H	2H	8.52	9.61	8.92	9.96	10.35	14.74	15.83	15.14	16.18	16.56
	3H	10.18	11.07	10.59	11.47	11.88	15.10	15.99	15.51	16.39	16.80
	4H	10.98	11.78	11.42	12.20	12.65	15.29	16.09	15.73	16.51	16.95
	6H	11.62	12.31	12.08	12.76	13.22	15.52	16.21	15.98	16.66	17.12
	8H	11.85	12.50	12.32	12.95	13.42	15.62	16.27	16.09	16.71	17.19
	12H	12.07	12.64	12.55	13.12	13.59	15.75	16.32	16.24	16.80	17.28
8H	4H	11.43	12.07	11.89	12.52	12.99	15.33	15.97	15.80	16.42	16.89
	6H	12.33	12.86	12.84	13.36	13.84	15.66	16.19	16.16	16.68	17.16
	8H	12.75	13.23	13.27	13.74	14.24	15.84	16.32	16.37	16.84	17.33
	12H	13.17	13.59	13.68	14.09	14.66	16.09	16.52	16.61	17.01	17.58
12H	4H	11.48	12.05	11.97	12.54	13.01	15.32	15.89	15.80	16.37	16.85
	6H	12.47	12.95	12.99	13.46	13.95	15.67	16.15	16.19	16.66	17.16
	8H	13.01	13.43	13.52	13.92	14.49	15.93	16.35	16.44	16.84	17.42