

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: P1059376

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059376  
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-S775D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

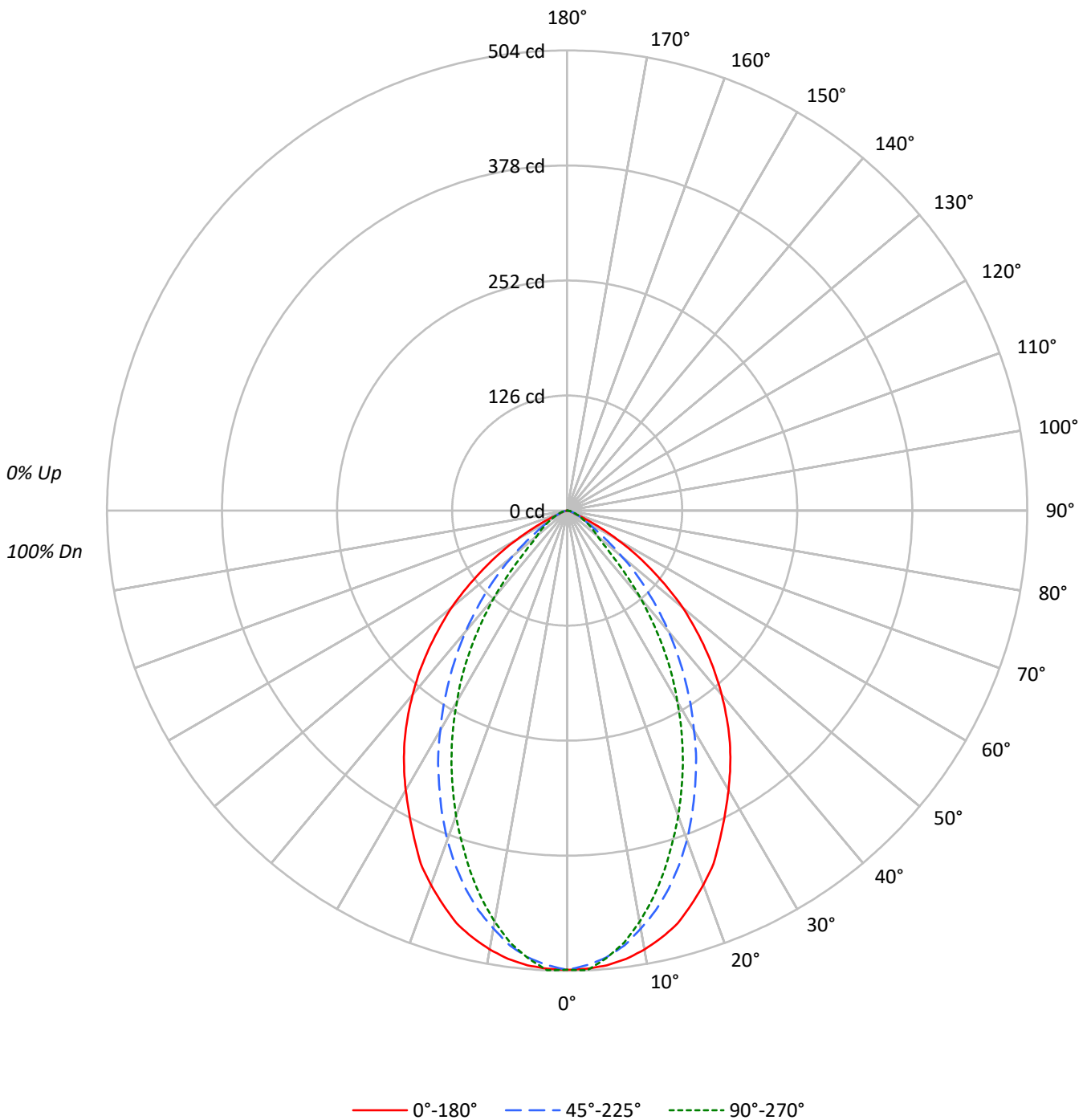
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 649.4 lumens  
Efficiency: N/A  
Efficacy: 25.2 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°	5906	5906	5906
5°	5892	5791	5801
10°	5821	5543	5450
15°	5689	5215	4979
20°	5450	4797	4447
25°	5135	4298	3884
30°	4793	3769	3273
35°	4454	3215	2635
40°	4035	2650	1910
45°	3555	2056	1151
50°	3016	1436	782
55°	2295	860	653
60°	1501	550	512
65°	628	411	411
70°	213	295	319
75°	177	213	250
80°	108	156	210
85°	108	108	216

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3555 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.5	7.2
10°-20°	121.6	18.7
20°-30°	155.9	24.0
30°-40°	146.3	22.5
40°-50°	102.1	15.7
50°-60°	52.8	8.1
60°-70°	18.0	2.8
70°-80°	5.2	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°	323.9	49.9
0°-40°	470.3	72.4
0°-60°	625.1	96.3
0°-90°	649.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	649.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	500	499	491	494	492	47
15°	468	456	429	415	410	131
25°	396	371	332	309	300	182
35°	311	272	224	195	184	193
45°	214	175	124	86	69	165
55°	112	84	42	33	32	101
65°	23	20	15	14	15	27
75°	4	4	5	6	6	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°	503.0	503.0	503.0	503.0	503.0
2.5°	502.2	503.0	498.4	503.0	503.8
5°	499.9	499.1	491.3	493.7	492.1
7.5°	495.2	492.9	480.4	477.3	477.3
10°	488.2	483.6	464.9	459.4	457.1
12.5°	478.9	472.7	448.5	438.4	434.5
15°	468.0	456.3	429.0	415.0	409.6
17.5°	452.4	436.8	407.2	390.9	382.3
20°	436.1	416.6	383.9	364.4	355.9
22.5°	418.9	395.6	358.2	337.2	327.8
25°	396.3	371.4	331.7	309.1	299.8
27.5°	374.5	348.1	306.0	280.3	271.0
30°	353.5	322.4	278.0	253.1	241.4
32.5°	332.5	297.5	251.5	224.3	213.4
35°	310.7	272.5	224.3	195.4	183.8
37.5°	287.3	248.4	198.6	167.4	153.4
40°	263.2	222.7	172.9	137.8	124.6
42.5°	239.1	199.3	147.2	111.4	95.8
45°	214.1	175.2	123.8	85.7	69.3
47.5°	189.2	151.1	101.2	62.3	52.2
50°	165.1	128.5	78.6	45.9	42.8
52.5°	138.6	106.7	59.2	38.2	37.4
55°	112.1	84.1	42.0	32.7	31.9
57.5°	88.8	65.4	30.4	27.3	26.5
60°	63.9	46.7	23.4	22.6	21.8
62.5°	42.0	31.9	18.7	17.9	17.9
65°	22.6	19.5	14.8	14.0	14.8
67.5°	9.3	10.9	10.9	11.7	11.7
70°	6.2	7.0	8.6	9.3	9.3
72.5°	4.7	5.5	6.2	7.0	7.0
75°	3.9	3.9	4.7	5.5	5.5
77.5°	2.3	3.1	3.1	3.9	4.7
80°	1.6	2.3	2.3	3.1	3.1
82.5°	0.8	1.6	1.6	2.3	2.3
85°	0.8	0.8	0.8	0.8	1.6
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	12.50	13.76	12.87	14.07	14.39	6.02	7.28	6.38	7.59	7.91
	3H	12.46	13.56	12.84	13.90	14.26	6.79	7.90	7.17	8.23	8.60
	4H	12.40	13.43	12.81	13.78	14.17	7.00	8.03	7.40	8.38	8.76
	6H	12.33	13.28	12.75	13.65	14.04	7.14	8.08	7.55	8.45	8.85
	8H	12.29	13.18	12.72	13.57	13.98	7.17	8.06	7.60	8.46	8.86
	12H	12.25	13.10	12.68	13.48	13.91	7.19	8.04	7.62	8.43	8.86
4H	2H	12.35	13.38	12.75	13.73	14.12	6.28	7.30	6.68	7.66	8.04
	3H	12.34	13.17	12.75	13.57	13.98	7.18	8.01	7.59	8.42	8.82
	4H	12.28	13.03	12.72	13.45	13.89	7.45	8.20	7.89	8.62	9.06
	6H	12.23	12.86	12.69	13.31	13.78	7.67	8.31	8.14	8.76	9.22
	8H	12.17	12.77	12.64	13.22	13.69	7.73	8.32	8.20	8.77	9.24
	12H	12.13	12.65	12.62	13.14	13.61	7.77	8.29	8.26	8.78	9.25
8H	4H	12.17	12.77	12.64	13.21	13.69	7.44	8.03	7.91	8.48	8.95
	6H	12.11	12.59	12.61	13.09	13.57	7.71	8.19	8.21	8.69	9.17
	8H	12.06	12.49	12.58	13.01	13.50	7.81	8.24	8.33	8.76	9.25
	12H	12.02	12.40	12.54	12.90	13.47	7.88	8.27	8.40	8.76	9.34
12H	4H	12.12	12.65	12.61	13.13	13.61	7.40	7.92	7.89	8.41	8.88
	6H	12.05	12.48	12.57	13.00	13.49	7.67	8.10	8.19	8.62	9.11
	8H	12.02	12.40	12.54	12.90	13.47	7.80	8.19	8.32	8.68	9.26