

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: P1060608

Luminaire Tested: S124RDRP-S795D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060608  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D940-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

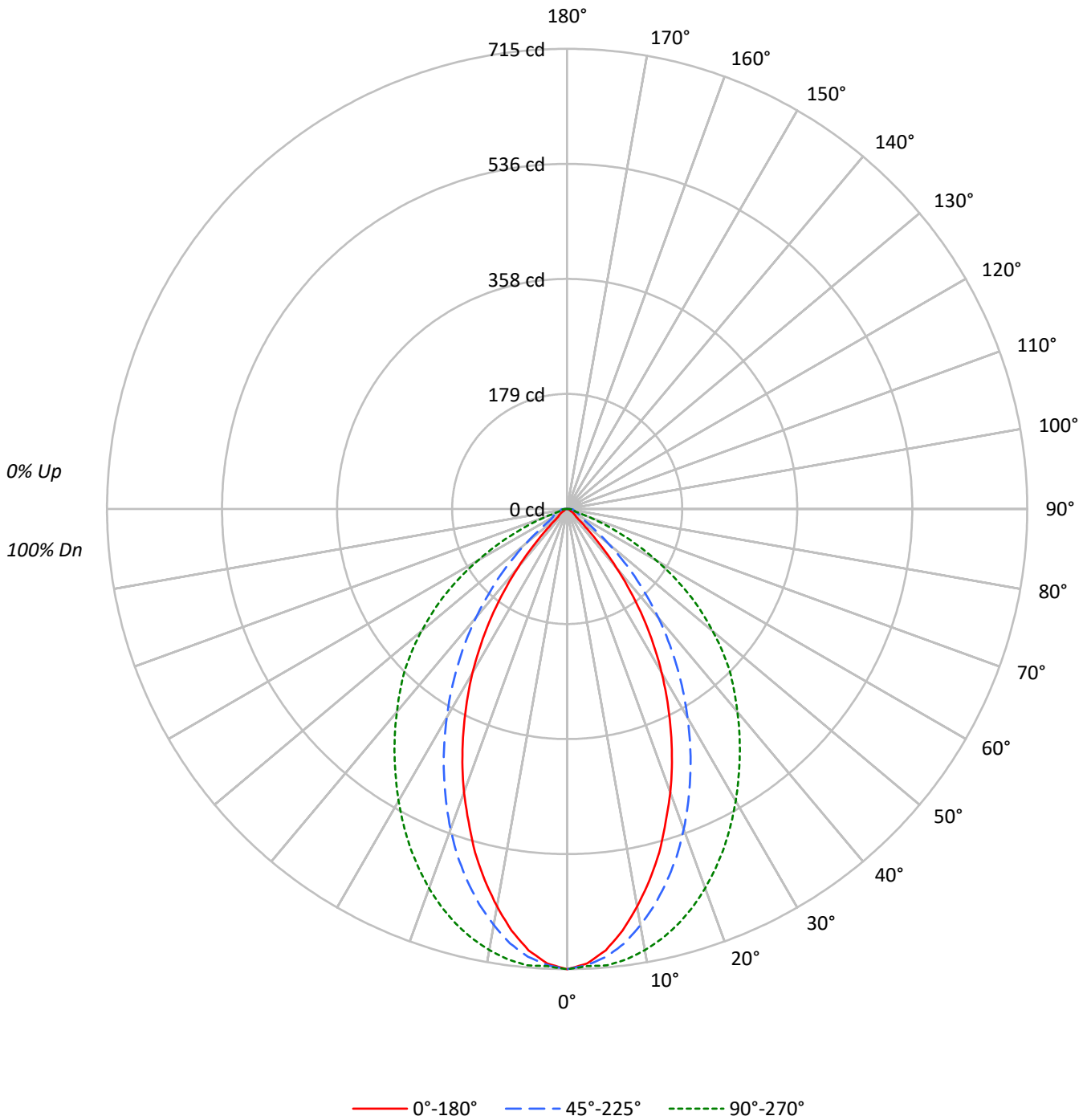
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 901.4 lumens  
Efficiency: N/A  
Efficacy: 34.9 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96  
Luminous Opening: Rectangular (W 0.31' 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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

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

	0°	45°	90°
0°	6159	6159	6159
5°	5950	6037	6153
10°	5483	5740	6085
15°	4925	5336	5950
20°	4292	4854	5747
25°	3621	4307	5496
30°	2921	3723	5208
35°	2162	3115	4916
40°	1340	2482	4623
45°	532	1810	4355
50°	236	1136	3959
55°	189	593	3465
60°	131	448	2761
65°	86	444	1899
70°	86	400	889
75°	113	393	393
80°	169	456	456
85°	336	909	662

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4355 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.6	7.3
10°-20°	169.3	18.8
20°-30°	213.7	23.7
30°-40°	196.1	21.8
40°-50°	133.5	14.8
50°-60°	72.7	8.1
60°-70°	31.5	3.5
70°-80°	11.5	1.3
80°-90°	7.4	0.8
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°	448.7	49.8
0°-40°	644.7	71.5
0°-60°	851.0	94.4
0°-90°	901.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	901.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	715	715	715	715	715	
5°	688	698	698	706	712	64
15°	552	572	598	641	667	154
25°	381	408	453	526	578	174
35°	206	236	296	390	468	127
45°	44	73	149	264	358	41
55°	13	13	40	145	231	11
65°	4	6	22	45	93	5
75°	3	11	12	12	12	4
85°	3	8	9	9	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	715.2	715.2	715.2	715.2	715.2
2.5°	706.8	715.2	709.3	711.0	711.0
5°	688.3	697.6	698.4	706.0	711.8
7.5°	660.6	674.1	680.8	695.9	706.0
10°	627.1	643.0	656.4	682.5	695.9
12.5°	591.0	609.4	629.6	664.0	683.3
15°	552.4	571.7	598.5	641.3	667.4
17.5°	509.5	533.0	565.8	617.0	648.9
20°	468.4	491.9	529.7	587.6	627.1
22.5°	425.6	449.9	491.9	556.5	603.6
25°	381.1	408.0	453.3	525.5	578.4
27.5°	337.5	366.0	413.8	492.8	551.5
30°	293.8	322.3	374.4	459.2	523.8
32.5°	249.3	278.7	334.9	423.9	495.3
35°	205.7	235.9	296.3	390.3	467.6
37.5°	161.2	193.1	257.7	357.6	439.9
40°	119.2	151.1	220.8	324.9	411.3
42.5°	79.7	111.6	183.0	293.0	384.5
45°	43.7	73.0	148.6	263.6	357.6
47.5°	23.5	40.3	115.0	235.0	327.4
50°	17.6	21.8	84.8	204.8	295.5
52.5°	15.1	16.8	58.8	172.9	263.6
55°	12.6	13.4	39.5	145.2	230.8
57.5°	10.1	10.9	29.4	117.5	195.6
60°	7.6	9.2	26.0	90.7	160.3
62.5°	5.9	7.6	24.3	66.3	126.8
65°	4.2	5.9	21.8	45.3	93.2
67.5°	4.2	6.7	18.5	29.4	63.0
70°	3.4	9.2	15.9	19.3	35.3
72.5°	3.4	10.1	13.4	13.4	13.4
75°	3.4	10.9	11.8	11.8	11.8
77.5°	3.4	10.1	10.9	10.1	10.1
80°	3.4	9.2	9.2	9.2	9.2
82.5°	3.4	8.4	9.2	9.2	7.6
85°	3.4	7.6	9.2	9.2	6.7
87.5°	2.5	7.6	8.4	8.4	5.0
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	0.00	0.00	0.00	0.00	0.00	14.72	16.00	15.09	16.31	16.63
	3H	0.00	0.00	0.00	0.24	0.60	15.10	16.23	15.48	16.56	16.93
	4H	0.01	1.06	0.41	1.41	1.79	15.08	16.13	15.48	16.48	16.87
	6H	1.20	2.17	1.62	2.54	2.93	15.07	16.03	15.48	16.40	16.80
	8H	1.80	2.71	2.23	3.10	3.51	15.07	15.98	15.50	16.37	16.78
	12H	2.48	3.35	2.91	3.73	4.16	15.08	15.95	15.51	16.34	16.77
4H	2H	0.96	2.01	1.37	2.37	2.75	14.53	15.59	14.94	15.94	16.32
	3H	2.55	3.40	2.96	3.81	4.21	14.95	15.81	15.37	16.22	16.62
	4H	3.84	4.61	4.28	5.03	5.48	14.95	15.72	15.39	16.14	16.58
	6H	4.98	5.64	5.44	6.09	6.55	14.99	15.66	15.46	16.10	16.57
	8H	5.49	6.11	5.96	6.56	7.03	15.02	15.64	15.49	16.09	16.56
	12H	6.05	6.60	6.54	7.08	7.56	15.09	15.63	15.57	16.12	16.59
8H	4H	4.93	5.55	5.40	6.00	6.47	14.86	15.48	15.33	15.93	16.40
	6H	6.47	6.98	6.98	7.48	7.96	14.94	15.45	15.45	15.94	16.43
	8H	7.29	7.74	7.81	8.26	8.75	15.02	15.48	15.55	16.00	16.49
	12H	8.13	8.53	8.64	9.02	9.60	15.19	15.60	15.71	16.09	16.66
12H	4H	5.12	5.66	5.61	6.15	6.62	14.83	15.37	15.31	15.86	16.33
	6H	6.83	7.28	7.35	7.80	8.29	14.91	15.37	15.44	15.89	16.38
	8H	7.84	8.24	8.36	8.74	9.31	15.05	15.45	15.57	15.95	16.52