

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: P1060581

Luminaire Tested: S124RDRP-S795D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060581  
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-S795D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

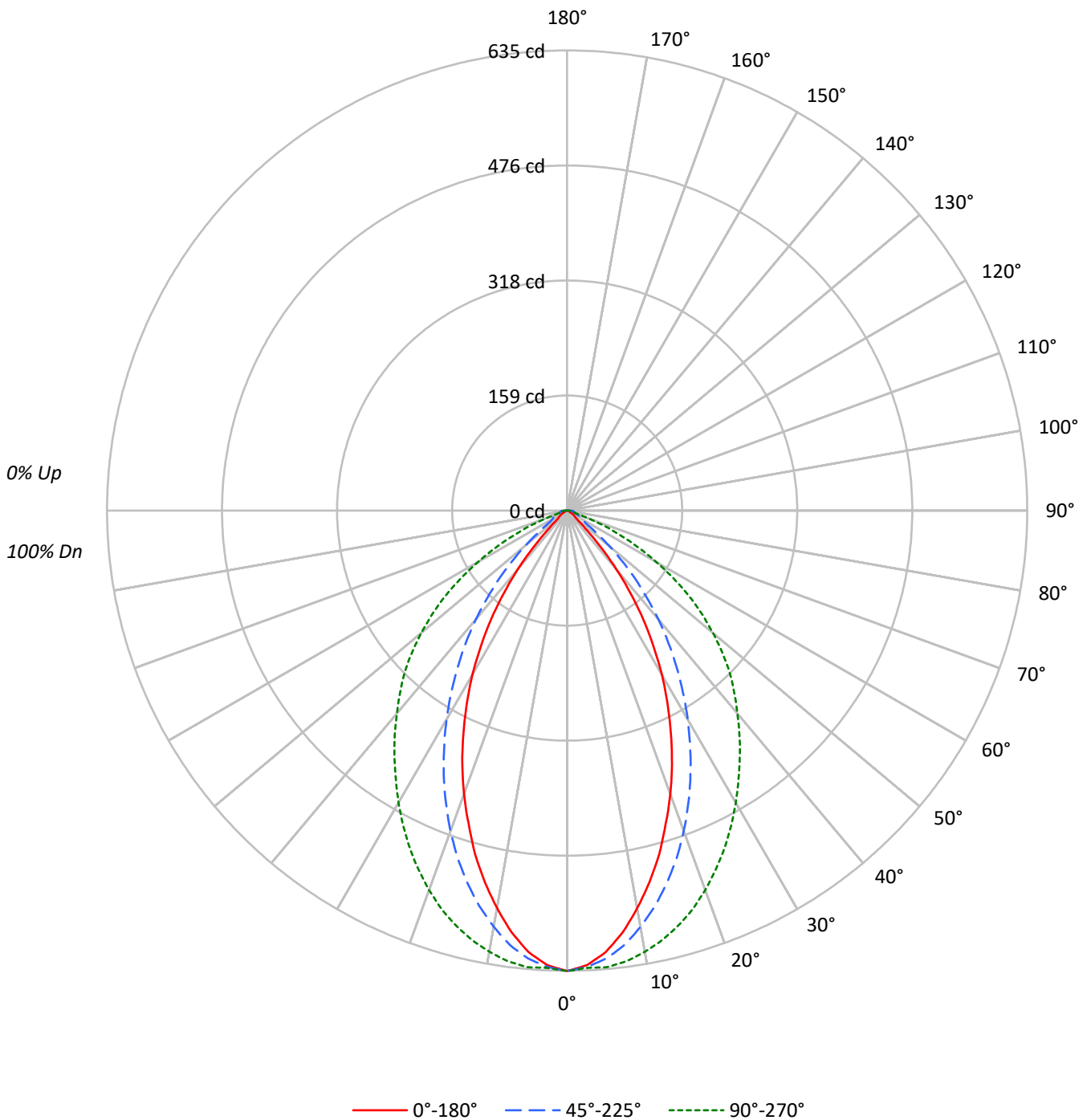
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 800.8 lumens  
Efficiency: N/A  
Efficacy: 31.0 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°	5472	5472	5472
5°	5286	5364	5466
10°	4871	5099	5406
15°	4375	4740	5286
20°	3813	4312	5105
25°	3217	3826	4882
30°	2595	3307	4627
35°	1921	2767	4367
40°	1190	2204	4107
45°	473	1607	3869
50°	210	1009	3517
55°	168	525	3079
60°	115	398	2452
65°	75	395	1687
70°	76	358	788
75°	100	346	346
80°	149	407	407
85°	296	810	593

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3869 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.3	7.3
10°-20°	150.4	18.8
20°-30°	189.9	23.7
30°-40°	174.2	21.8
40°-50°	118.6	14.8
50°-60°	64.6	8.1
60°-70°	28.0	3.5
70°-80°	10.2	1.3
80°-90°	6.6	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°	398.6	49.8
0°-40°	572.8	71.5
0°-60°	756.0	94.4
0°-90°	800.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	635	635	635	635	635	
5°	612	620	620	627	632	57
15°	491	508	532	570	593	136
25°	339	362	403	467	514	155
35°	183	210	263	347	415	113
45°	39	65	132	234	318	36
55°	11	12	35	129	205	10
65°	4	5	19	40	83	4
75°	3	10	10	10	10	3
85°	3	7	8	8	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	635.4	635.4	635.4	635.4	635.4
2.5°	627.9	635.4	630.2	631.6	631.6
5°	611.5	619.7	620.5	627.2	632.4
7.5°	586.9	598.8	604.8	618.2	627.2
10°	557.1	571.2	583.2	606.3	618.2
12.5°	525.0	541.4	559.3	589.9	607.0
15°	490.7	507.9	531.7	569.7	592.9
17.5°	452.7	473.5	502.6	548.1	576.5
20°	416.1	437.0	470.6	522.0	557.1
22.5°	378.1	399.7	437.0	494.4	536.2
25°	338.6	362.4	402.7	466.8	513.8
27.5°	299.8	325.1	367.7	437.8	490.0
30°	261.0	286.4	332.6	407.9	465.3
32.5°	221.5	247.6	297.6	376.6	440.0
35°	182.7	209.6	263.2	346.8	415.4
37.5°	143.2	171.5	228.9	317.7	390.8
40°	105.9	134.2	196.1	288.6	365.4
42.5°	70.8	99.2	162.6	260.3	341.6
45°	38.8	64.9	132.0	234.2	317.7
47.5°	20.9	35.8	102.2	208.8	290.8
50°	15.7	19.4	75.3	182.0	262.5
52.5°	13.4	14.9	52.2	153.6	234.2
55°	11.2	11.9	35.0	129.0	205.1
57.5°	8.9	9.7	26.1	104.4	173.8
60°	6.7	8.2	23.1	80.5	142.4
62.5°	5.2	6.7	21.6	58.9	112.6
65°	3.7	5.2	19.4	40.3	82.8
67.5°	3.7	6.0	16.4	26.1	55.9
70°	3.0	8.2	14.2	17.2	31.3
72.5°	3.0	8.9	11.9	11.9	11.9
75°	3.0	9.7	10.4	10.4	10.4
77.5°	3.0	8.9	9.7	8.9	8.9
80°	3.0	8.2	8.2	8.2	8.2
82.5°	3.0	7.5	8.2	8.2	6.7
85°	3.0	6.7	8.2	8.2	6.0
87.5°	2.2	6.7	7.5	7.5	4.5
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	14.31	15.59	14.68	15.90	16.22
	3H	0.00	0.00	0.00	0.00	0.20	14.69	15.82	15.07	16.15	16.52
	4H	0.00	0.64	0.00	1.00	1.38	14.67	15.72	15.07	16.07	16.45
	6H	0.77	1.74	1.19	2.11	2.51	14.65	15.62	15.07	15.99	16.39
	8H	1.37	2.28	1.80	2.68	3.08	14.65	15.57	15.09	15.96	16.37
	12H	2.05	2.92	2.48	3.30	3.73	14.67	15.54	15.10	15.92	16.36
4H	2H	0.56	1.61	0.96	1.96	2.35	14.12	15.18	14.53	15.53	15.91
	3H	2.14	3.00	2.55	3.40	3.81	14.54	15.40	14.96	15.81	16.21
	4H	3.44	4.20	3.87	4.62	5.07	14.54	15.31	14.98	15.73	16.17
	6H	4.56	5.22	5.03	5.67	6.14	14.58	15.24	15.05	15.69	16.16
	8H	5.08	5.70	5.55	6.14	6.61	14.61	15.23	15.08	15.67	16.15
	12H	5.63	6.18	6.12	6.66	7.14	14.67	15.22	15.16	15.70	16.18
8H	4H	4.52	5.14	4.99	5.58	6.05	14.45	15.07	14.92	15.52	15.99
	6H	6.06	6.57	6.56	7.06	7.54	14.53	15.03	15.03	15.53	16.01
	8H	6.88	7.33	7.40	7.85	8.34	14.61	15.07	15.14	15.58	16.08
	12H	7.71	8.11	8.23	8.61	9.18	14.78	15.19	15.30	15.68	16.25
12H	4H	4.71	5.25	5.19	5.74	6.21	14.41	14.96	14.90	15.44	15.92
	6H	6.42	6.87	6.94	7.39	7.88	14.50	14.96	15.03	15.47	15.97
	8H	7.44	7.84	7.95	8.33	8.90	14.64	15.04	15.16	15.54	16.11