

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: P1060623

Luminaire Tested: S124RDRP-S795D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060623  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D950-X4F0-XX-UDD-WVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

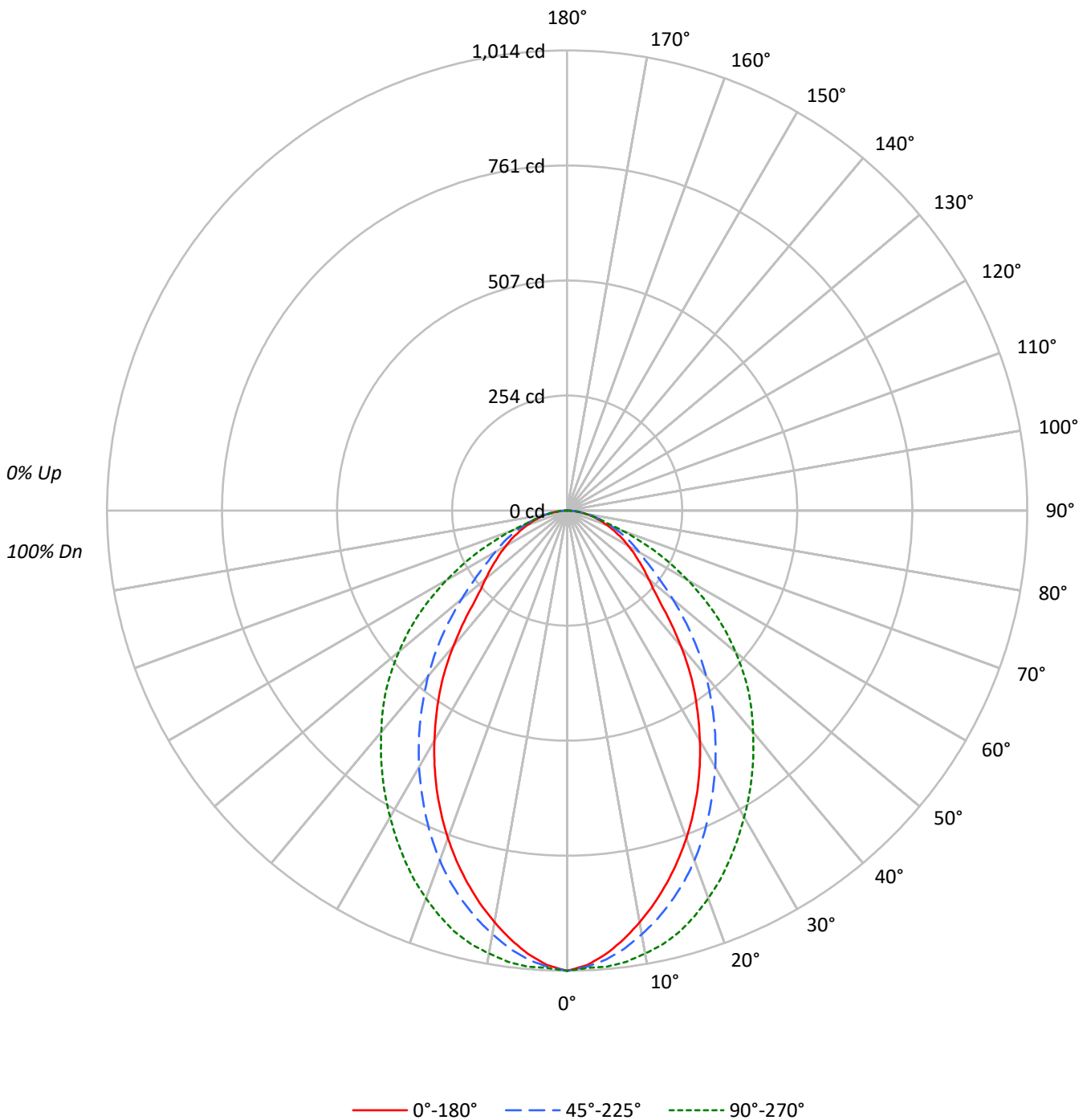
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1861.0 lumens  
Efficiency: N/A  
Efficacy: 72.1 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11  
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	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					100			
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89					87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77					75				
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67					65				
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59					57				
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52					50				
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47					45				
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42					40				
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38					37				
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35					33				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32					31				

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

	0°	45°	90°
0°	8733	8733	8733
5°	8480	8581	8720
10°	8052	8288	8664
15°	7570	7937	8561
20°	7041	7517	8332
25°	6455	7019	8059
30°	5819	6488	7755
35°	5151	5934	7463
40°	4378	5357	7163
45°	3585	4732	6885
50°	3139	4065	6481
55°	2884	3504	5996
60°	2675	3153	5287
65°	2506	2963	4426
70°	2349	2712	3321
75°	2209	2479	2419
80°	2048	2271	2048
85°	1857	2213	1778

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6885 cd/sqm



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CATALOG NUMBER: S124RDRP-S795D950-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.7	5.0
10°-20°	252.2	13.6
20°-30°	344.7	18.5
30°-40°	362.3	19.5
40°-50°	314.4	16.9
50°-60°	237.2	12.7
60°-70°	153.7	8.3
70°-80°	78.9	4.2
80°-90°	23.9	1.3
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°	690.6	37.1
0°-40°	1052.9	56.6
0°-60°	1604.5	86.2
0°-90°	1861.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1861.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1014	1014	1014	1014	1014	
5°	981	994	993	1001	1009	92
15°	849	870	890	931	960	238
25°	679	704	739	795	848	311
35°	490	517	564	640	710	305
45°	294	322	389	486	565	232
55°	192	198	233	331	399	173
65°	123	126	145	176	217	122
75°	66	74	74	75	73	71
85°	19	23	22	22	18	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1014.2	1014.2	1014.2	1014.2	1014.2
2.5°	1002.5	1015.1	1006.1	1007.9	1008.8
5°	981.0	994.5	992.7	1000.7	1008.8
7.5°	953.2	969.3	972.9	989.1	1002.5
10°	920.9	938.8	947.8	973.8	990.9
12.5°	886.7	904.7	920.9	954.1	978.3
15°	849.1	869.7	890.3	930.7	960.3
17.5°	809.6	831.1	857.1	901.1	936.1
20°	768.3	789.8	820.3	867.9	909.2
22.5°	724.3	748.5	780.8	832.0	880.5
25°	679.4	703.7	738.7	795.2	848.2
27.5°	632.8	657.9	695.6	758.4	814.9
30°	585.2	612.1	652.5	718.9	779.9
32.5°	536.7	565.4	608.5	679.4	745.8
35°	490.0	517.0	564.5	639.9	709.9
37.5°	441.6	468.5	519.7	601.3	674.0
40°	389.5	419.1	476.6	561.0	637.2
42.5°	341.1	370.7	432.6	522.4	602.2
45°	294.4	322.2	388.6	485.6	565.4
47.5°	258.5	278.2	344.6	449.7	525.9
50°	234.3	243.2	303.4	410.2	483.8
52.5°	212.7	219.9	265.7	370.7	442.5
55°	192.1	197.5	233.4	331.2	399.4
57.5°	174.1	176.8	204.6	291.7	352.7
60°	155.3	158.9	183.1	251.3	307.0
62.5°	140.0	141.8	164.2	212.7	261.2
65°	123.0	125.7	145.4	175.9	217.2
67.5°	107.7	112.2	125.7	143.6	171.4
70°	93.3	99.6	107.7	116.7	131.9
72.5°	79.9	87.1	91.5	95.1	92.4
75°	66.4	74.5	74.5	75.4	72.7
77.5°	53.9	61.0	60.1	59.2	55.6
80°	41.3	47.6	45.8	44.9	41.3
82.5°	30.5	35.0	33.2	32.3	27.8
85°	18.8	23.3	22.4	21.5	18.0
87.5°	9.0	13.5	12.6	11.7	8.1
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	14.03	15.52	14.40	15.83	16.15	17.77	19.26	18.14	19.57	19.89
	3H	15.70	17.03	16.08	17.36	17.72	18.90	20.23	19.27	20.56	20.92
	4H	16.37	17.61	16.77	17.96	18.34	19.19	20.44	19.59	20.79	21.17
	6H	16.87	18.03	17.29	18.39	18.79	19.39	20.54	19.80	20.91	21.30
	8H	17.05	18.15	17.48	18.54	18.94	19.45	20.54	19.87	20.93	21.34
	12H	17.17	18.22	17.60	18.60	19.03	19.48	20.53	19.91	20.91	21.34
4H	2H	14.82	16.07	15.22	16.42	16.80	17.94	19.18	18.34	19.53	19.91
	3H	16.70	17.73	17.11	18.13	18.53	19.27	20.30	19.68	20.70	21.10
	4H	17.50	18.43	17.93	18.85	19.29	19.68	20.61	20.12	21.03	21.47
	6H	18.14	18.95	18.60	19.40	19.86	20.00	20.81	20.46	21.26	21.72
	8H	18.37	19.12	18.83	19.57	20.04	20.10	20.86	20.56	21.30	21.77
	12H	18.53	19.21	19.01	19.69	20.16	20.17	20.85	20.65	21.33	21.80
8H	4H	17.85	18.60	18.31	19.05	19.52	19.82	20.57	20.28	21.02	21.49
	6H	18.64	19.26	19.14	19.76	20.23	20.24	20.86	20.73	21.35	21.83
	8H	18.96	19.52	19.47	20.03	20.52	20.39	20.95	20.91	21.46	21.95
	12H	19.22	19.72	19.73	20.21	20.77	20.53	21.03	21.04	21.52	22.09
12H	4H	17.88	18.55	18.36	19.03	19.50	19.82	20.50	20.30	20.98	21.45
	6H	18.70	19.26	19.21	19.77	20.26	20.26	20.82	20.77	21.33	21.82
	8H	19.09	19.58	19.60	20.07	20.64	20.47	20.96	20.98	21.45	22.02