

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: P1060551

Luminaire Tested: S124RDRP-S795D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060551  
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-S795D830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

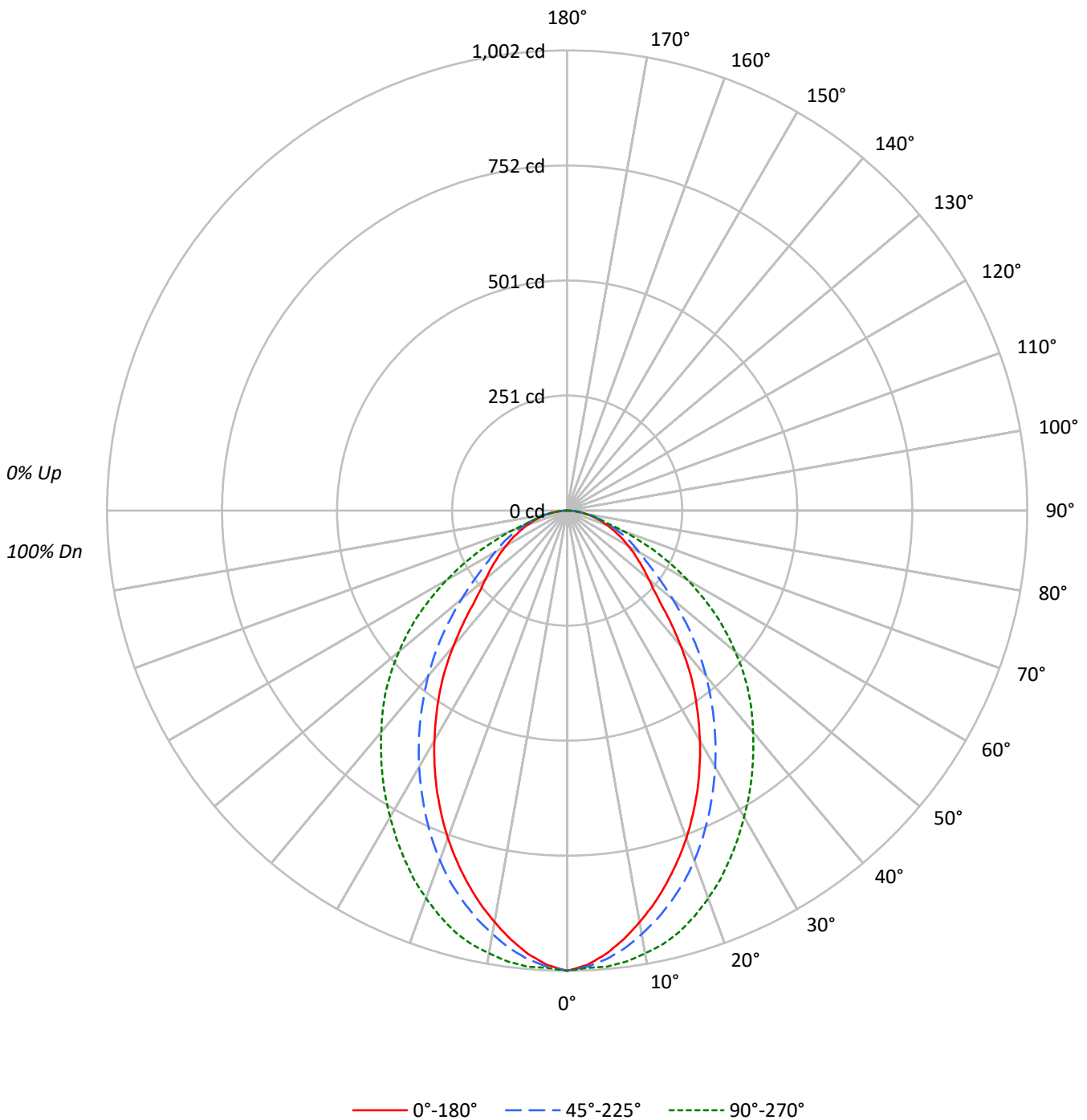
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1838.7 lumens  
Efficiency: N/A  
Efficacy: 71.3 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 (Ain): 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	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													87															
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75													75															
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65													65															
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57													57															
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50													50															
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45													45															
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40													40															
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37													37															
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33													33															
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31													31															

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

	0°	45°	90°
0°	8628	8628	8628
5°	8378	8477	8615
10°	7955	8188	8560
15°	7479	7842	8458
20°	6956	7427	8232
25°	6378	6934	7962
30°	5749	6410	7662
35°	5090	5864	7373
40°	4326	5293	7077
45°	3543	4676	6803
50°	3100	4015	6404
55°	2849	3462	5924
60°	2642	3116	5224
65°	2476	2928	4373
70°	2321	2679	3283
75°	2183	2449	2389
80°	2023	2241	2023
85°	1838	2193	1749

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6803 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.6	5.0
10°-20°	249.2	13.6
20°-30°	340.6	18.5
30°-40°	357.9	19.5
40°-50°	310.6	16.9
50°-60°	234.3	12.7
60°-70°	151.9	8.3
70°-80°	77.9	4.2
80°-90°	23.6	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°	682.3	37.1
0°-40°	1040.3	56.6
0°-60°	1585.2	86.2
0°-90°	1838.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1838.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1002	1002	1002	1002	1002	
5°	969	982	981	989	997	91
15°	839	859	880	920	949	235
25°	671	695	730	786	838	308
35°	484	511	558	632	701	301
45°	291	318	384	480	559	229
55°	190	195	231	327	395	171
65°	122	124	144	174	215	121
75°	66	74	74	74	72	70
85°	19	23	22	21	18	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1002.0	1002.0	1002.0	1002.0	1002.0
2.5°	990.5	1002.9	994.0	995.8	996.7
5°	969.2	982.5	980.7	988.7	996.7
7.5°	941.7	957.7	961.2	977.2	990.5
10°	909.8	927.5	936.4	962.1	979.0
12.5°	876.1	893.8	909.8	942.6	966.5
15°	838.9	859.3	879.6	919.6	948.8
17.5°	799.8	821.1	846.8	890.3	924.9
20°	759.1	780.3	810.5	857.5	898.3
22.5°	715.6	739.5	771.5	822.0	869.9
25°	671.3	695.2	729.8	785.7	838.0
27.5°	625.2	650.0	687.2	749.3	805.2
30°	578.2	604.8	644.7	710.3	770.6
32.5°	530.3	558.6	601.2	671.3	736.9
35°	484.2	510.8	557.8	632.2	701.4
37.5°	436.3	462.9	513.4	594.1	665.9
40°	384.8	414.1	470.9	554.2	629.6
42.5°	337.0	366.2	427.4	516.1	595.0
45°	290.9	318.3	384.0	479.7	558.6
47.5°	255.4	274.9	340.5	444.3	519.6
50°	231.4	240.3	299.7	405.2	478.0
52.5°	210.2	217.3	262.5	366.2	437.2
55°	189.8	195.1	230.6	327.2	394.6
57.5°	172.0	174.7	202.2	288.2	348.5
60°	153.4	157.0	180.9	248.3	303.3
62.5°	138.3	140.1	162.3	210.2	258.0
65°	121.5	124.1	143.7	173.8	214.6
67.5°	106.4	110.8	124.1	141.9	169.4
70°	92.2	98.4	106.4	115.3	130.4
72.5°	78.9	86.0	90.4	94.0	91.3
75°	65.6	73.6	73.6	74.5	71.8
77.5°	53.2	60.3	59.4	58.5	55.0
80°	40.8	47.0	45.2	44.3	40.8
82.5°	30.1	34.6	32.8	31.9	27.5
85°	18.6	23.1	22.2	21.3	17.7
87.5°	8.9	13.3	12.4	11.5	8.0
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	13.99	15.48	14.36	15.79	16.11	17.73	19.22	18.09	19.53	19.84
	3H	15.66	16.99	16.04	17.32	17.68	18.86	20.19	19.23	20.52	20.88
	4H	16.32	17.57	16.72	17.92	18.30	19.15	20.40	19.55	20.75	21.13
	6H	16.83	17.98	17.24	18.35	18.74	19.35	20.50	19.76	20.87	21.26
	8H	17.01	18.10	17.43	18.49	18.90	19.41	20.50	19.83	20.89	21.29
	12H	17.13	18.18	17.56	18.56	18.99	19.44	20.49	19.87	20.87	21.30
4H	2H	14.78	16.03	15.18	16.38	16.76	17.89	19.14	18.29	19.49	19.87
	3H	16.65	17.69	17.06	18.09	18.49	19.23	20.26	19.64	20.66	21.06
	4H	17.46	18.39	17.89	18.81	19.25	19.64	20.57	20.07	20.99	21.43
	6H	18.10	18.91	18.56	19.35	19.82	19.96	20.77	20.42	21.22	21.68
	8H	18.32	19.08	18.79	19.53	19.99	20.06	20.81	20.52	21.26	21.73
	12H	18.49	19.16	18.97	19.64	20.12	20.13	20.80	20.61	21.28	21.76
8H	4H	17.81	18.56	18.27	19.01	19.48	19.77	20.53	20.24	20.98	21.44
	6H	18.60	19.22	19.09	19.71	20.19	20.19	20.82	20.69	21.31	21.79
	8H	18.91	19.48	19.43	19.99	20.47	20.35	20.91	20.87	21.42	21.91
	12H	19.18	19.67	19.69	20.17	20.73	20.49	20.99	21.00	21.48	22.04
12H	4H	17.84	18.51	18.32	18.99	19.46	19.78	20.45	20.26	20.93	21.41
	6H	18.66	19.22	19.17	19.73	20.22	20.21	20.78	20.73	21.29	21.78
	8H	19.04	19.54	19.55	20.03	20.60	20.42	20.92	20.93	21.41	21.98