

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060577

Luminaire Tested: S124RDR-S795D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060577  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S795D850-X4F0-XX-UDD-WVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

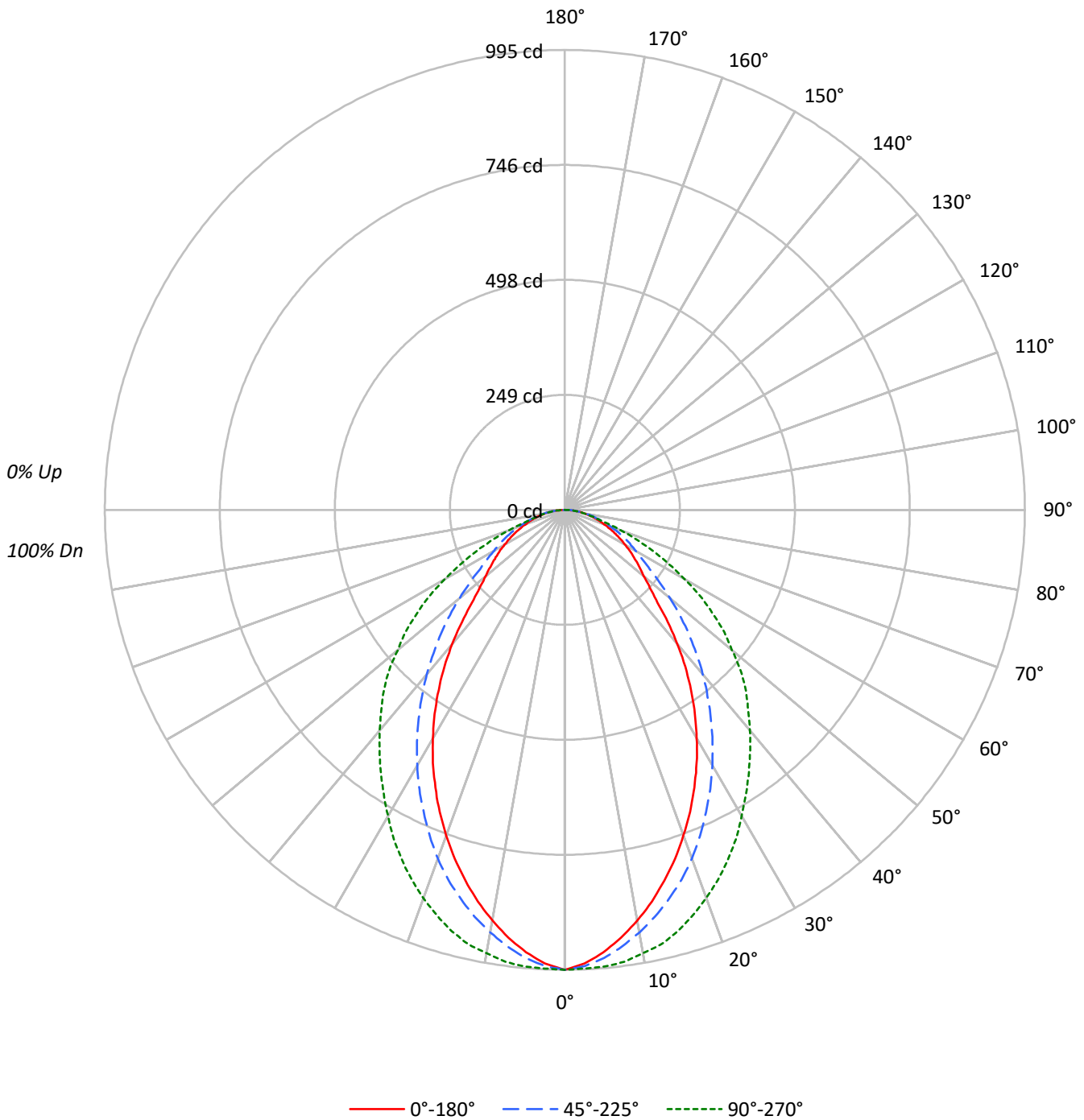
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1811.9 lumens  
Efficiency: N/A  
Efficacy: 70.2 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1  
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									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																			
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																			
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																			
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																			
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50																			
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																			
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41																			
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37																			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31																			

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

	0°	45°	90°
0°	8570	8570	8570
5°	8305	8413	8576
10°	7891	8119	8520
15°	7403	7766	8417
20°	6874	7361	8192
25°	6294	6859	7930
30°	5674	6348	7604
35°	5001	5790	7292
40°	4257	5218	7001
45°	3456	4612	6745
50°	2990	3969	6316
55°	2771	3367	5858
60°	2587	3036	5139
65°	2423	2849	4273
70°	2258	2626	3230
75°	2153	2429	2326
80°	2018	2227	1964
85°	1857	2065	1541

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6745 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.9	5.1
10°-20°	247.0	13.6
20°-30°	337.2	18.6
30°-40°	353.3	19.5
40°-50°	305.8	16.9
50°-60°	229.8	12.7
60°-70°	148.2	8.2
70°-80°	76.0	4.2
80°-90°	22.7	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°	676.1	37.3
0°-40°	1029.4	56.8
0°-60°	1565.0	86.4
0°-90°	1811.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1811.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	995	995	995	995	995	
5°	961	975	973	981	992	90
15°	830	851	871	911	944	233
25°	662	688	722	778	835	304
35°	476	503	551	624	694	296
45°	284	313	379	472	554	224
55°	185	191	224	320	390	166
65°	119	121	140	169	210	118
75°	65	72	73	72	70	68
85°	19	22	21	20	16	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	995.2	995.2	995.2	995.2	995.2
2.5°	982.7	995.2	987.9	990.0	993.1
5°	960.8	975.4	973.3	980.6	992.1
7.5°	933.7	949.3	952.5	969.1	985.8
10°	902.4	920.1	928.5	953.5	974.4
12.5°	868.0	886.7	901.3	932.6	962.9
15°	830.4	851.3	871.1	910.7	944.1
17.5°	791.8	812.7	838.7	882.6	920.1
20°	750.1	773.0	803.3	849.2	894.0
22.5°	707.3	731.3	763.6	813.7	865.9
25°	662.4	687.5	721.9	778.2	834.6
27.5°	617.6	642.6	681.2	740.7	802.2
30°	570.6	596.7	638.4	703.1	764.7
32.5°	523.7	551.9	594.6	663.5	729.2
35°	475.7	502.8	550.8	623.8	693.7
37.5°	427.7	455.9	507.0	585.2	658.3
40°	378.7	407.9	464.2	546.6	622.8
42.5°	329.7	361.0	420.4	507.0	587.3
45°	283.8	313.0	378.7	471.5	553.9
47.5°	249.3	269.1	337.0	437.1	516.4
50°	223.2	233.7	296.3	399.6	471.5
52.5°	203.4	210.7	258.7	358.9	435.0
55°	184.6	190.9	224.3	320.3	390.2
57.5°	168.0	171.1	198.2	282.7	347.4
60°	150.2	153.4	176.3	242.0	298.4
62.5°	134.6	136.7	158.6	203.4	253.5
65°	118.9	121.0	139.8	169.0	209.7
67.5°	104.3	107.5	122.1	137.7	166.9
70°	89.7	96.0	104.3	111.6	128.3
72.5°	77.2	83.5	87.6	89.7	90.8
75°	64.7	72.0	73.0	72.0	69.9
77.5°	52.2	58.4	58.4	56.3	54.2
80°	40.7	45.9	44.9	42.8	39.6
82.5°	30.3	33.4	32.3	30.3	27.1
85°	18.8	21.9	20.9	19.8	15.6
87.5°	9.4	12.5	11.5	10.4	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)