

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: P1060571

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060571  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S795D850-X4F0-XX-UDD-BVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

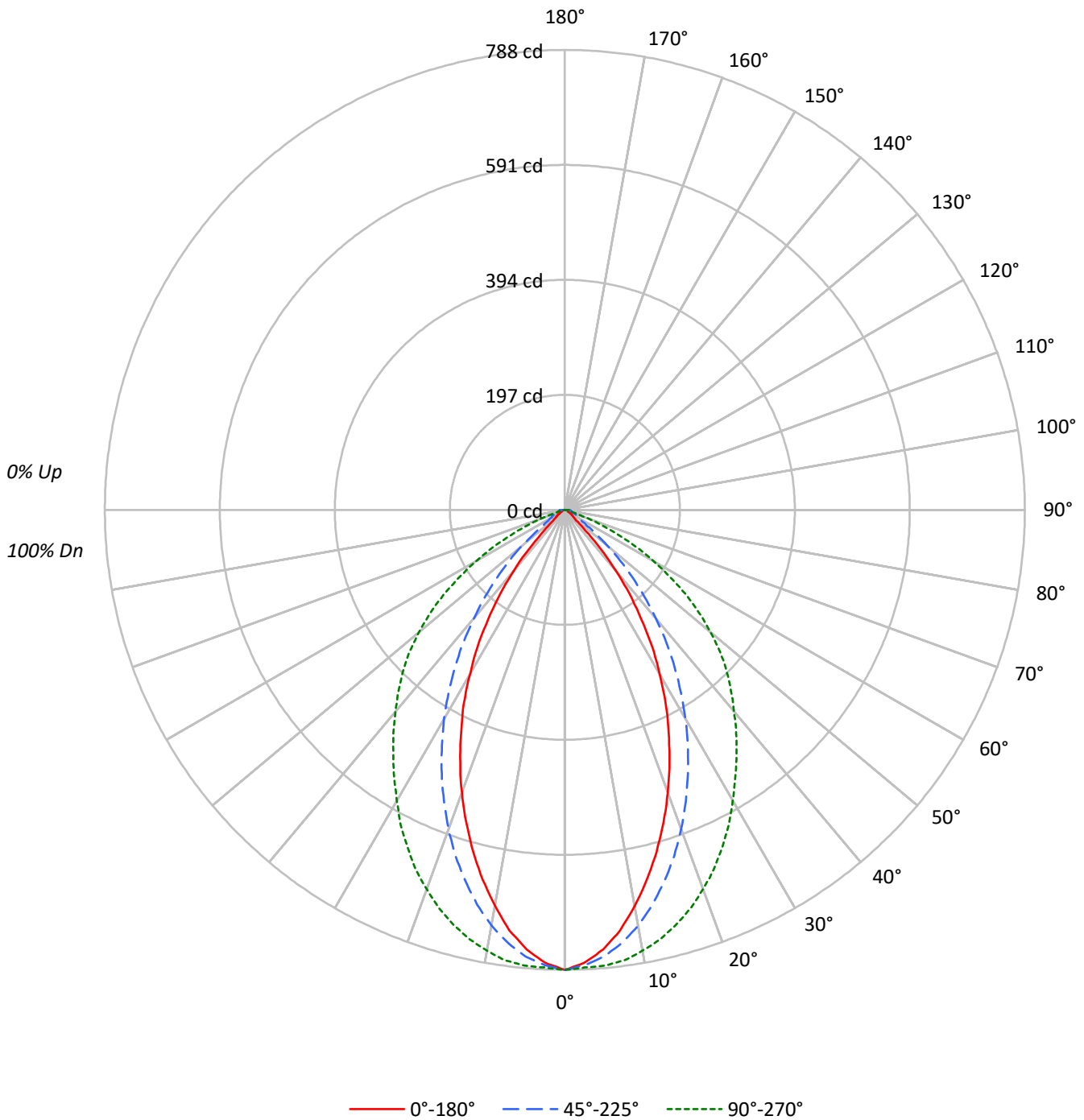
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 989.1 lumens  
Efficiency: N/A  
Efficacy: 38.3 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
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	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	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	6786	6786	6786
5°	6532	6640	6776
10°	6024	6325	6708
15°	5406	5871	6560
20°	4725	5337	6341
25°	3996	4740	6059
30°	3228	4110	5718
35°	2403	3434	5388
40°	1525	2723	5069
45°	610	1996	4780
50°	265	1273	4363
55°	204	658	3807
60°	145	450	3021
65°	106	446	2062
70°	106	395	947
75°	140	416	383
80°	208	466	417
85°	415	830	622

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4780 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.1	7.3
10°-20°	186.1	18.8
20°-30°	235.0	23.8
30°-40°	215.9	21.8
40°-50°	147.2	14.9
50°-60°	79.8	8.1
60°-70°	33.9	3.4
70°-80°	11.7	1.2
80°-90°	7.5	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°	493.2	49.9
0°-40°	709.1	71.7
0°-60°	936.0	94.6
0°-90°	989.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	989.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	788	788	788	788	788	
5°	756	767	768	774	784	70
15°	606	626	659	706	736	169
25°	421	448	499	576	638	192
35°	229	259	327	429	512	142
45°	50	80	164	290	392	46
55°	14	15	44	160	254	12
65°	5	6	22	50	101	5
75°	4	12	12	12	12	4
85°	4	8	8	8	6	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	788.1	788.1	788.1	788.1	788.1
2.5°	776.6	786.0	780.7	782.8	784.9
5°	755.7	767.2	768.2	774.5	783.9
7.5°	726.5	740.0	748.4	764.0	778.7
10°	688.9	705.6	723.3	748.4	767.2
12.5°	649.2	667.0	693.1	728.6	753.6
15°	606.4	626.3	658.6	705.6	735.9
17.5°	561.6	583.5	622.1	677.4	716.0
20°	515.6	539.6	582.4	645.1	692.0
22.5°	468.7	493.7	540.7	611.7	667.0
25°	420.6	447.8	498.9	576.2	637.7
27.5°	374.7	399.8	456.1	540.7	608.5
30°	324.6	352.8	413.3	504.1	575.1
32.5°	278.7	305.8	369.5	466.6	543.8
35°	228.6	258.9	326.7	429.0	512.5
37.5°	181.6	210.8	285.0	393.5	482.2
40°	135.7	166.0	242.2	358.0	450.9
42.5°	90.8	123.2	201.4	321.5	421.7
45°	50.1	80.4	163.9	290.2	392.5
47.5°	26.1	43.8	128.4	258.9	361.1
50°	19.8	24.0	95.0	224.4	325.7
52.5°	16.7	17.7	64.7	190.0	290.2
55°	13.6	14.6	43.8	159.7	253.6
57.5°	10.4	11.5	31.3	130.5	212.9
60°	8.4	9.4	26.1	100.2	175.4
62.5°	6.3	7.3	25.1	74.1	137.8
65°	5.2	6.3	21.9	50.1	101.2
67.5°	4.2	6.3	18.8	32.4	67.8
70°	4.2	8.4	15.7	20.9	37.6
72.5°	4.2	9.4	13.6	13.6	13.6
75°	4.2	11.5	12.5	11.5	11.5
77.5°	4.2	10.4	10.4	10.4	10.4
80°	4.2	9.4	9.4	9.4	8.4
82.5°	4.2	8.4	9.4	9.4	7.3
85°	4.2	8.4	8.4	8.4	6.3
87.5°	3.1	8.4	8.4	8.4	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)