

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: P1060580

Luminaire Tested: S124RDR-S795D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060580  
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-S795D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

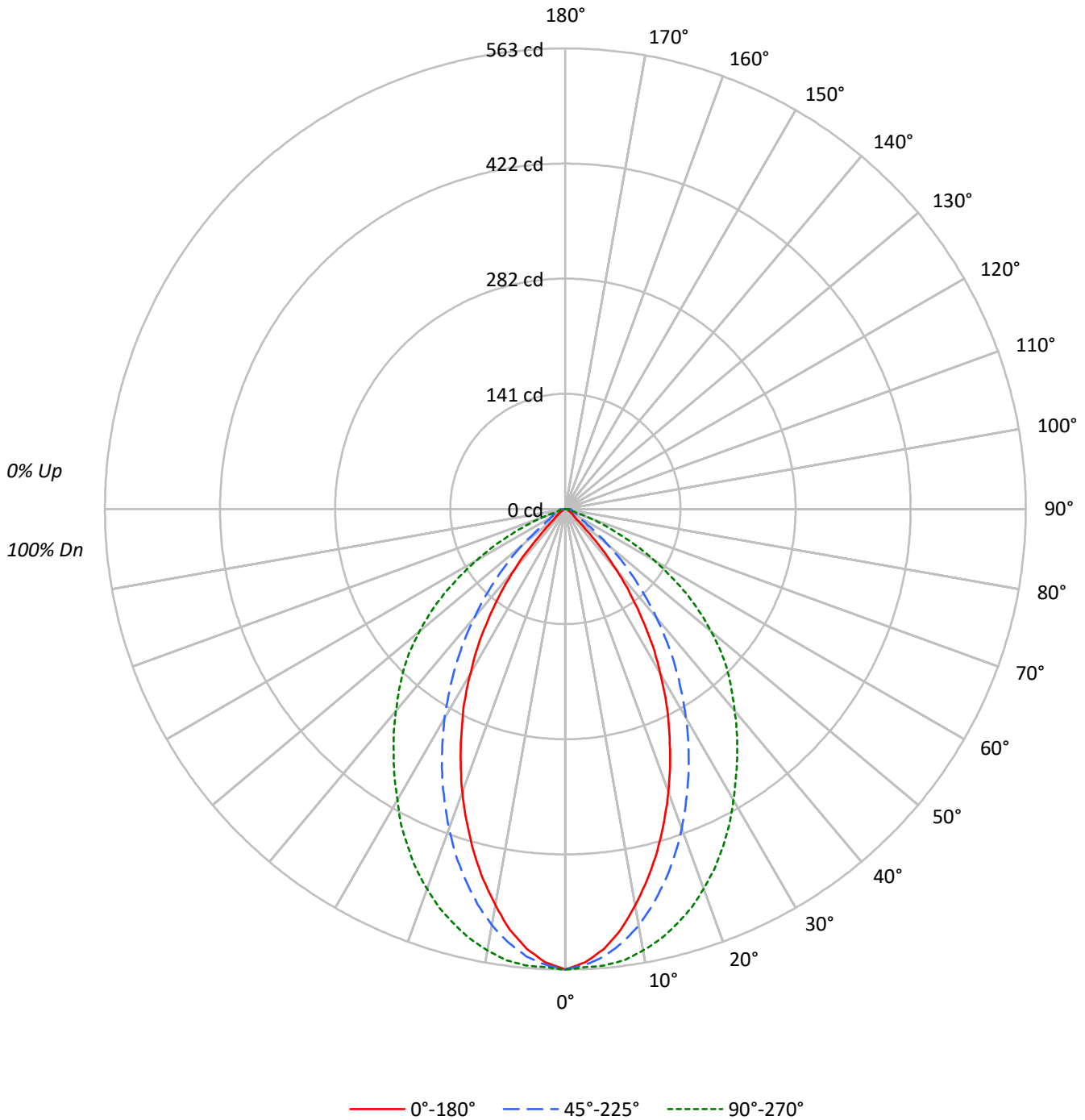
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 706.5 lumens  
Efficiency: N/A  
Efficacy: 27.4 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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90	
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81			81	
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73			73	
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65			65	
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59			59	
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54	
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50			50	
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46			46	
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42			42	
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39			39	

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

	0°	45°	90°
0°	4847	4847	4847
5°	4666	4744	4840
10°	4303	4518	4792
15°	3862	4194	4686
20°	3375	3812	4530
25°	2855	3386	4329
30°	2306	2936	4085
35°	1717	2454	3849
40°	1089	1945	3621
45°	436	1426	3413
50°	190	908	3116
55°	146	470	2720
60°	103	320	2158
65°	75	320	1473
70°	76	282	675
75°	100	296	273
80°	149	332	298
85°	296	593	445

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3413 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.5	7.3
10°-20°	132.9	18.8
20°-30°	167.9	23.8
30°-40°	154.2	21.8
40°-50°	105.1	14.9
50°-60°	57.0	8.1
60°-70°	24.2	3.4
70°-80°	8.4	1.2
80°-90°	5.3	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°	352.3	49.9
0°-40°	506.5	71.7
0°-60°	668.6	94.6
0°-90°	706.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	706.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	540	548	549	553	560	50
15°	433	447	470	504	526	121
25°	300	320	356	412	456	137
35°	163	185	233	306	366	101
45°	36	57	117	207	280	33
55°	10	10	31	114	181	9
65°	4	4	16	36	72	4
75°	3	8	9	8	8	3
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	562.9	562.9	562.9	562.9	562.9
2.5°	554.7	561.4	557.7	559.2	560.7
5°	539.8	548.0	548.8	553.2	559.9
7.5°	518.9	528.6	534.6	545.8	556.2
10°	492.1	504.0	516.7	534.6	548.0
12.5°	463.8	476.4	495.1	520.4	538.3
15°	433.2	447.4	470.5	504.0	525.6
17.5°	401.1	416.8	444.4	483.9	511.5
20°	368.3	385.5	416.0	460.8	494.3
22.5°	334.8	352.7	386.2	436.9	476.4
25°	300.5	319.9	356.4	411.6	455.6
27.5°	267.7	285.6	325.8	386.2	434.7
30°	231.9	252.0	295.3	360.1	410.8
32.5°	199.1	218.5	263.9	333.3	388.5
35°	163.3	184.9	233.4	306.4	366.1
37.5°	129.7	150.6	203.5	281.1	344.5
40°	96.9	118.5	173.0	255.7	322.1
42.5°	64.9	88.0	143.9	229.6	301.2
45°	35.8	57.4	117.1	207.3	280.3
47.5°	18.6	31.3	91.7	184.9	258.0
50°	14.2	17.1	67.8	160.3	232.6
52.5°	11.9	12.7	46.2	135.7	207.3
55°	9.7	10.4	31.3	114.1	181.2
57.5°	7.5	8.2	22.4	93.2	152.1
60°	6.0	6.7	18.6	71.6	125.3
62.5°	4.5	5.2	17.9	52.9	98.4
65°	3.7	4.5	15.7	35.8	72.3
67.5°	3.0	4.5	13.4	23.1	48.5
70°	3.0	6.0	11.2	14.9	26.8
72.5°	3.0	6.7	9.7	9.7	9.7
75°	3.0	8.2	8.9	8.2	8.2
77.5°	3.0	7.5	7.5	7.5	7.5
80°	3.0	6.7	6.7	6.7	6.0
82.5°	3.0	6.0	6.7	6.7	5.2
85°	3.0	6.0	6.0	6.0	4.5
87.5°	2.2	6.0	6.0	6.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)