

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: P1060599

Luminaire Tested: S124RDR-S795D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

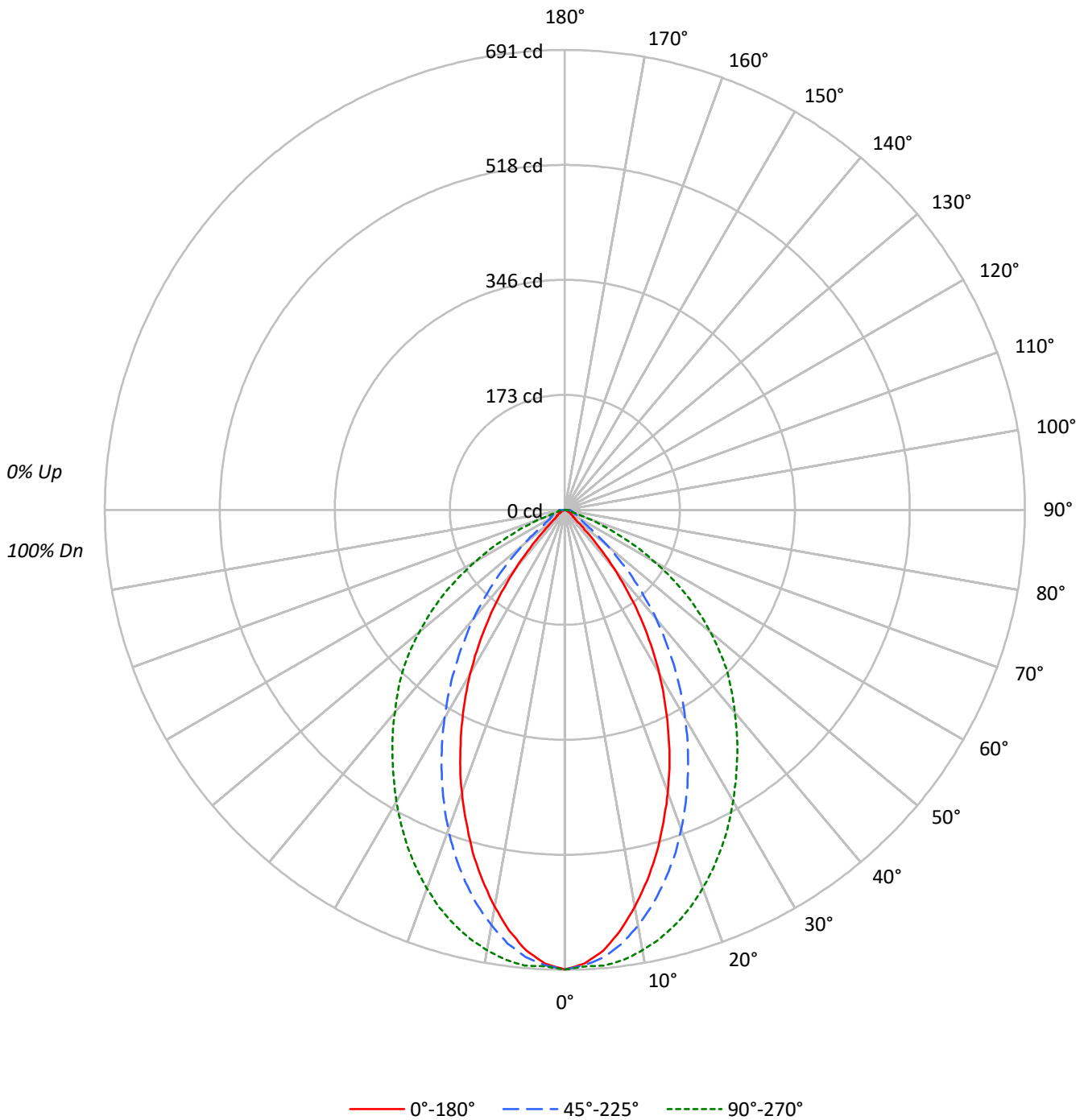
Lumens per Lamp: N/A
Luminaire Lumens: 870.3 lumens
Efficiency: N/A
Efficacy: 33.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: S124RDR-S795D935-X4F0-XX-UDD-BVL-W

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				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5947	5947	5947
5°	5745	5830	5941
10°	5294	5542	5875
15°	4754	5152	5745
20°	4145	4686	5549
25°	3496	4159	5306
30°	2821	3594	5029
35°	2088	3008	4746
40°	1294	2397	4465
45°	513	1748	4205
50°	228	1097	3822
55°	183	572	3346
60°	126	432	2666
65°	84	430	1834
70°	81	388	856
75°	106	376	376
80°	159	441	441
85°	316	879	642

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4205 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	7.3
10°-20°	163.5	18.8
20°-30°	206.4	23.7
30°-40°	189.3	21.8
40°-50°	128.9	14.8
50°-60°	70.2	8.1
60°-70°	30.4	3.5
70°-80°	11.1	1.3
80°-90°	7.1	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°	433.2	49.8
0°-40°	622.5	71.5
0°-60°	821.7	94.4
0°-90°	870.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	870.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	665	674	674	682	687	62
15°	533	552	578	619	644	148
25°	368	394	438	507	558	168
35°	199	228	286	377	452	123
45°	42	70	144	254	345	39
55°	12	13	38	140	223	11
65°	4	6	21	44	90	5
75°	3	10	11	11	11	3
85°	3	7	9	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	690.6	690.6	690.6	690.6	690.6
2.5°	682.5	690.6	684.9	686.5	686.5
5°	664.6	673.5	674.4	681.7	687.3
7.5°	637.9	650.9	657.3	671.9	681.7
10°	605.5	620.9	633.8	659.0	671.9
12.5°	570.6	588.4	607.9	641.1	659.8
15°	533.3	552.0	577.9	619.2	644.4
17.5°	492.0	514.7	546.3	595.7	626.5
20°	452.3	475.0	511.4	567.4	605.5
22.5°	410.9	434.4	475.0	537.4	582.8
25°	368.0	393.9	437.7	507.4	558.5
27.5°	325.8	353.4	399.6	475.8	532.5
30°	283.7	311.2	361.5	443.4	505.8
32.5°	240.7	269.1	323.4	409.3	478.2
35°	198.6	227.8	286.1	376.9	451.5
37.5°	155.6	186.4	248.8	345.3	424.7
40°	115.1	145.9	213.2	313.7	397.2
42.5°	77.0	107.8	176.7	282.9	371.2
45°	42.1	70.5	143.5	254.5	345.3
47.5°	22.7	38.9	111.0	226.9	316.1
50°	17.0	21.1	81.9	197.8	285.3
52.5°	14.6	16.2	56.7	167.0	254.5
55°	12.2	13.0	38.1	140.2	222.9
57.5°	9.7	10.5	28.4	113.5	188.9
60°	7.3	8.9	25.1	87.5	154.8
62.5°	5.7	7.3	23.5	64.0	122.4
65°	4.1	5.7	21.1	43.8	90.0
67.5°	4.1	6.5	17.8	28.4	60.8
70°	3.2	8.9	15.4	18.6	34.0
72.5°	3.2	9.7	13.0	13.0	13.0
75°	3.2	10.5	11.3	11.3	11.3
77.5°	3.2	9.7	10.5	9.7	9.7
80°	3.2	8.9	8.9	8.9	8.9
82.5°	3.2	8.1	8.9	8.9	7.3
85°	3.2	7.3	8.9	8.9	6.5
87.5°	2.4	7.3	8.1	8.1	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)