

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1061006

Luminaire Tested: S124RDR-H795D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061006
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H795D935-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

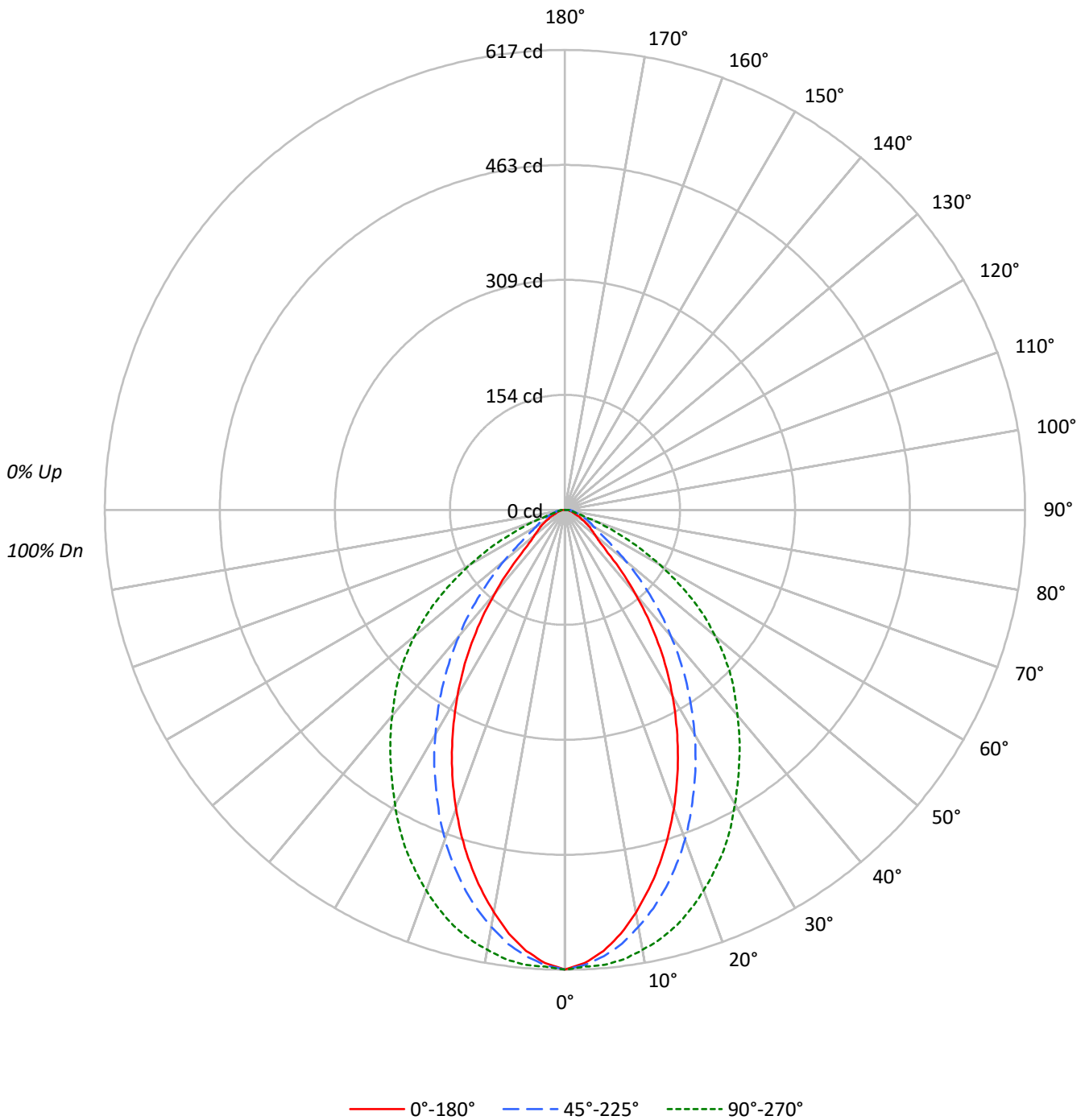
Lumens per Lamp: N/A
Luminaire Lumens: 867.1 lumens
Efficiency: N/A
Efficacy: 36.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5310	5310	5310
5°	5134	5195	5296
10°	4795	4967	5241
15°	4378	4672	5147
20°	3911	4313	4982
25°	3406	3891	4786
30°	2871	3456	4532
35°	2293	2994	4289
40°	1649	2487	4048
45°	994	1958	3831
50°	715	1419	3521
55°	601	953	3121
60°	486	756	2513
65°	383	687	1807
70°	335	574	967
75°	313	522	469
80°	312	545	426
85°	464	771	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3831 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	6.5
10°-20°	148.3	17.1
20°-30°	192.5	22.2
30°-40°	185.0	21.3
40°-50°	137.3	15.8
50°-60°	84.1	9.7
60°-70°	40.8	4.7
70°-80°	15.6	1.8
80°-90°	7.0	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°	397.4	45.8
0°-40°	582.4	67.2
0°-60°	803.7	92.7
0°-90°	867.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	867.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	617	617	617	617	617	
5°	594	602	601	606	613	55
15°	491	505	524	556	577	137
25°	358	377	410	462	504	164
35°	218	238	285	352	408	135
45°	82	102	161	246	315	68
55°	40	42	64	144	208	36
65°	19	20	34	53	89	19
75°	9	15	16	14	14	10
85°	5	8	8	7	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	616.7	616.7	616.7	616.7	616.7
2.5°	608.8	615.9	611.2	612.7	613.5
5°	593.9	602.5	601.0	606.5	612.7
7.5°	573.5	583.7	586.9	597.8	608.0
10°	548.4	561.0	568.0	586.1	599.4
12.5°	520.9	534.3	547.6	571.9	590.0
15°	491.1	505.3	524.1	555.5	577.4
17.5°	459.8	475.4	498.2	535.9	561.7
20°	426.8	443.3	470.7	512.3	543.7
22.5°	393.1	410.3	440.9	487.2	524.1
25°	358.5	376.6	409.5	462.1	503.7
27.5°	323.2	342.1	379.7	435.4	480.9
30°	288.7	306.8	347.6	408.0	455.8
32.5°	253.4	272.2	316.2	379.7	431.5
35°	218.1	237.7	284.8	352.3	408.0
37.5°	182.0	203.2	252.6	325.6	384.4
40°	146.7	167.1	221.2	298.1	360.1
42.5°	112.2	134.2	191.4	270.7	337.4
45°	81.6	102.0	160.8	245.6	314.6
47.5°	61.2	73.7	132.6	222.0	289.5
50°	53.4	55.7	105.9	196.1	262.8
52.5°	46.3	47.9	82.4	167.9	236.2
55°	40.0	41.6	63.5	143.6	207.9
57.5°	33.7	35.3	51.0	120.0	175.7
60°	28.2	29.8	43.9	95.7	145.9
62.5°	23.5	24.3	39.2	73.0	116.9
65°	18.8	20.4	33.7	53.4	88.7
67.5°	15.7	17.3	27.5	36.9	62.0
70°	13.3	17.3	22.8	25.9	38.4
72.5°	11.0	15.7	18.8	18.0	18.0
75°	9.4	14.9	15.7	14.1	14.1
77.5°	7.8	13.3	12.6	11.8	11.0
80°	6.3	11.0	11.0	9.4	8.6
82.5°	5.5	8.6	8.6	8.6	7.1
85°	4.7	7.8	7.8	7.1	5.5
87.5°	3.1	6.3	7.1	6.3	3.9
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	5.61	6.95	5.98	7.26	7.58	14.71	16.05	15.08	16.36	16.68
	3H	6.66	7.85	7.04	8.18	8.54	15.21	16.40	15.59	16.73	17.10
	4H	7.17	8.28	7.58	8.63	9.01	15.23	16.33	15.63	16.68	17.07
	6H	7.62	8.64	8.04	9.01	9.40	15.23	16.24	15.64	16.61	17.01
	8H	7.81	8.78	8.24	9.17	9.57	15.22	16.19	15.65	16.58	16.98
	12H	8.03	8.95	8.46	9.33	9.76	15.22	16.14	15.65	16.53	16.96
4H	2H	6.70	7.81	7.11	8.16	8.54	14.60	15.71	15.00	16.06	16.44
	3H	7.98	8.88	8.39	9.29	9.69	15.18	16.08	15.59	16.49	16.89
	4H	8.68	9.49	9.12	9.91	10.36	15.23	16.04	15.66	16.45	16.90
	6H	9.31	10.01	9.78	10.46	10.92	15.28	15.98	15.74	16.42	16.89
	8H	9.56	10.21	10.03	10.66	11.13	15.30	15.95	15.76	16.40	16.87
	12H	9.83	10.41	10.32	10.89	11.37	15.33	15.91	15.81	16.39	16.86
8H	4H	9.11	9.76	9.58	10.21	10.68	15.17	15.83	15.64	16.28	16.75
	6H	9.99	10.52	10.49	11.02	11.50	15.27	15.80	15.77	16.30	16.78
	8H	10.39	10.87	10.91	11.39	11.88	15.33	15.81	15.85	16.33	16.82
	12H	10.87	11.29	11.38	11.79	12.36	15.43	15.86	15.94	16.35	16.92
12H	4H	9.15	9.73	9.64	10.21	10.69	15.15	15.73	15.63	16.21	16.68
	6H	10.10	10.58	10.62	11.10	11.59	15.25	15.73	15.77	16.24	16.74
	8H	10.61	11.04	11.13	11.53	12.11	15.35	15.78	15.87	16.27	16.84