

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: P1061003

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061003
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-H795D935-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

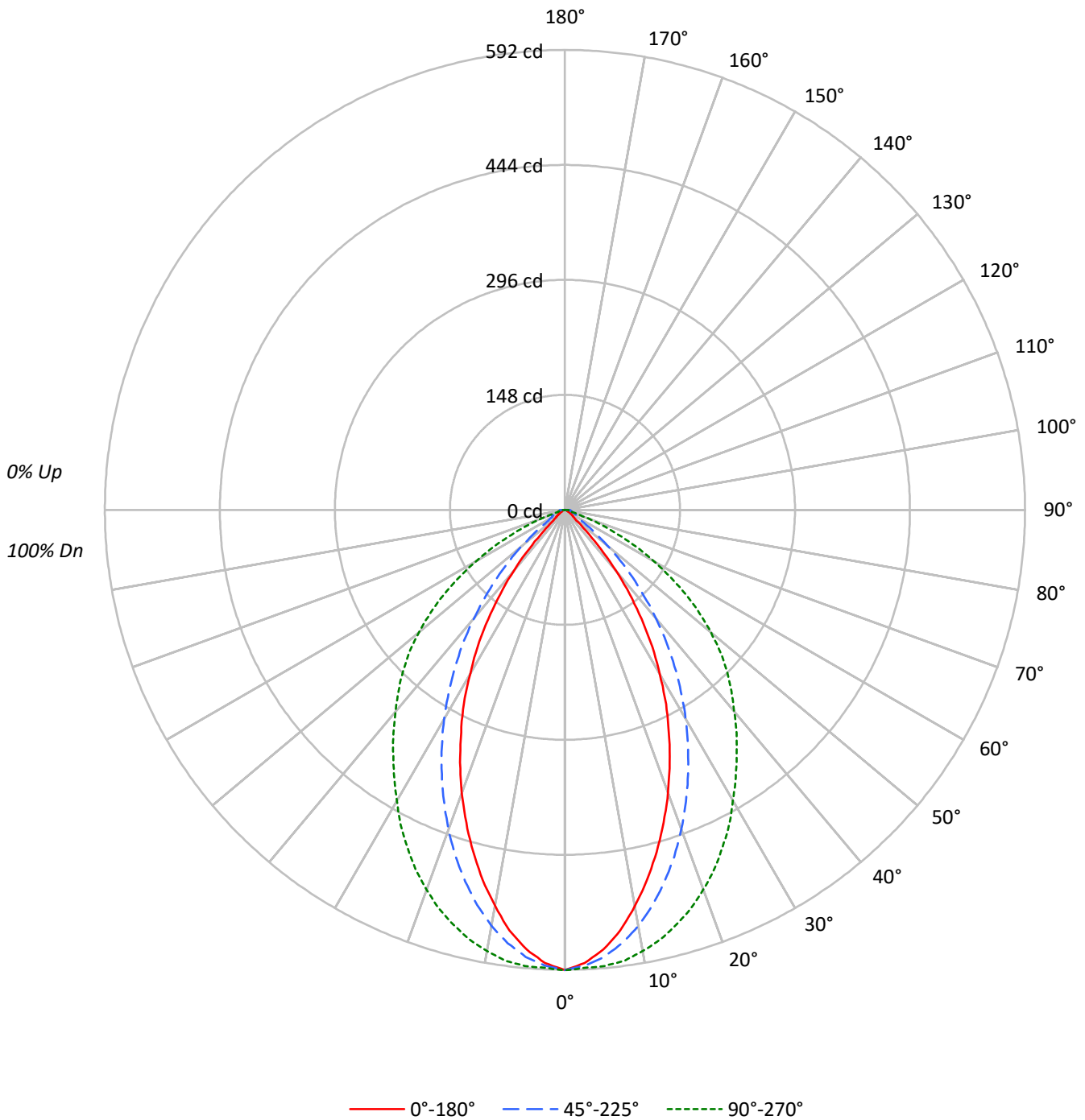
Lumens per Lamp: N/A
Luminaire Lumens: 743.6 lumens
Efficiency: N/A
Efficacy: 31.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1061003

CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061003

CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-BVL-S

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°	5102	5102	5102
5°	4911	4993	5094
10°	4529	4755	5044
15°	4064	4415	4932
20°	3553	4013	4768
25°	3004	3564	4556
30°	2427	3090	4299
35°	1807	2582	4050
40°	1147	2047	3811
45°	459	1500	3594
50°	200	957	3279
55°	153	495	2863
60°	109	338	2270
65°	79	336	1551
70°	78	297	713
75°	103	313	286
80°	154	352	312
85°	306	622	464

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3594 cd/sqm



TEST NUMBER: P1061003

CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	7.3
10°-20°	139.9	18.8
20°-30°	176.7	23.8
30°-40°	162.3	21.8
40°-50°	110.7	14.9
50°-60°	60.0	8.1
60°-70°	25.5	3.4
70°-80°	8.8	1.2
80°-90°	5.6	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°	370.8	49.9
0°-40°	533.1	71.7
0°-60°	703.7	94.6
0°-90°	743.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	743.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	568	577	578	582	589	53
15°	456	471	495	530	553	127
25°	316	337	375	433	480	145
35°	172	195	246	322	385	107
45°	38	60	123	218	295	35
55°	10	11	33	120	191	9
65°	4	5	16	38	76	4
75°	3	9	9	9	9	3
85°	3	6	6	6	5	3
90°	0	0	0	0	0	



TEST NUMBER: P1061003

CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	592.5	592.5	592.5	592.5	592.5
2.5°	583.8	590.9	587.0	588.5	590.1
5°	568.1	576.8	577.6	582.3	589.3
7.5°	546.2	556.4	562.6	574.4	585.4
10°	517.9	530.5	543.8	562.6	576.8
12.5°	488.1	501.4	521.1	547.7	566.6
15°	455.9	470.8	495.2	530.5	553.2
17.5°	422.2	438.7	467.7	509.3	538.3
20°	387.7	405.7	437.9	485.0	520.3
22.5°	352.3	371.2	406.5	459.9	501.4
25°	316.2	336.6	375.1	433.2	479.5
27.5°	281.7	300.6	342.9	406.5	457.5
30°	244.1	265.2	310.8	379.0	432.4
32.5°	209.5	229.9	277.8	350.8	408.8
35°	171.9	194.6	245.6	322.5	385.3
37.5°	136.5	158.5	214.2	295.8	362.5
40°	102.0	124.8	182.1	269.2	339.0
42.5°	68.3	92.6	151.5	241.7	317.0
45°	37.7	60.4	123.2	218.2	295.1
47.5°	19.6	33.0	96.5	194.6	271.5
50°	14.9	18.0	71.4	168.7	244.8
52.5°	12.6	13.3	48.7	142.8	218.2
55°	10.2	11.0	33.0	120.1	190.7
57.5°	7.8	8.6	23.5	98.1	160.1
60°	6.3	7.1	19.6	75.3	131.8
62.5°	4.7	5.5	18.8	55.7	103.6
65°	3.9	4.7	16.5	37.7	76.1
67.5°	3.1	4.7	14.1	24.3	51.0
70°	3.1	6.3	11.8	15.7	28.3
72.5°	3.1	7.1	10.2	10.2	10.2
75°	3.1	8.6	9.4	8.6	8.6
77.5°	3.1	7.8	7.8	7.8	7.8
80°	3.1	7.1	7.1	7.1	6.3
82.5°	3.1	6.3	7.1	7.1	5.5
85°	3.1	6.3	6.3	6.3	4.7
87.5°	2.4	6.3	6.3	6.3	3.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061003
 CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-BVL-S

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	0.00	0.00	0.00	0.00	0.00	14.10	15.38	14.47	15.69	16.01
	3H	0.00	0.00	0.00	0.00	0.00	14.46	15.59	14.84	15.92	16.28
	4H	0.00	0.02	0.00	0.37	0.76	14.43	15.48	14.83	15.83	16.21
	6H	0.33	1.29	0.75	1.67	2.06	14.40	15.36	14.82	15.73	16.13
	8H	1.01	1.92	1.44	2.31	2.72	14.39	15.30	14.82	15.69	16.10
	12H	1.81	2.68	2.24	3.06	3.49	14.39	15.26	14.82	15.64	16.07
4H	2H	0.00	0.85	0.20	1.20	1.58	13.91	14.96	14.31	15.31	15.69
	3H	1.22	2.08	1.64	2.48	2.89	14.30	15.16	14.72	15.56	15.97
	4H	2.66	3.43	3.10	3.85	4.29	14.28	15.05	14.72	15.47	15.91
	6H	3.90	4.56	4.37	5.01	5.48	14.30	14.96	14.76	15.41	15.87
	8H	4.47	5.09	4.94	5.53	6.01	14.31	14.93	14.78	15.37	15.84
	12H	5.14	5.68	5.63	6.17	6.64	14.35	14.89	14.83	15.37	15.85
8H	4H	3.73	4.35	4.21	4.80	5.27	14.18	14.80	14.65	15.24	15.72
	6H	5.35	5.85	5.85	6.35	6.83	14.23	14.73	14.74	15.23	15.71
	8H	6.19	6.64	6.71	7.16	7.65	14.29	14.74	14.81	15.26	15.75
	12H	7.15	7.55	7.67	8.05	8.62	14.41	14.81	14.92	15.30	15.87
12H	4H	3.93	4.47	4.41	4.95	5.43	14.14	14.69	14.63	15.17	15.64
	6H	5.70	6.15	6.23	6.67	7.16	14.20	14.65	14.72	15.17	15.66
	8H	6.73	7.13	7.24	7.62	8.19	14.31	14.71	14.82	15.20	15.77