

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: P1060994

Luminaire Tested: S124RDR-H795D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060994
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-H795D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

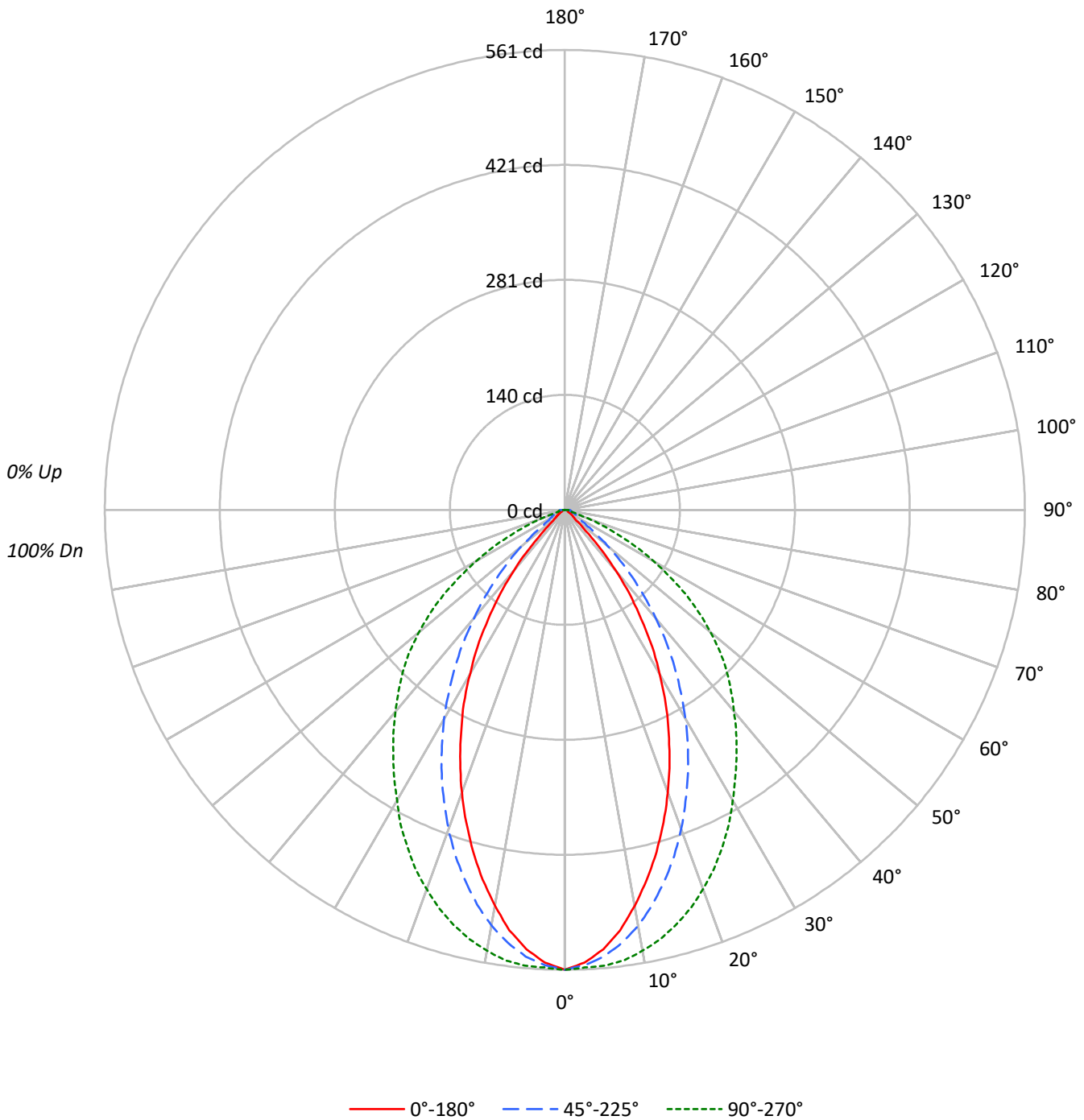
Lumens per Lamp: N/A
Luminaire Lumens: 704.1 lumens
Efficiency: N/A
Efficacy: 30.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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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				
1	112	108	105	103	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°	4831	4831	4831
5°	4650	4727	4824
10°	4288	4503	4776
15°	3849	4180	4671
20°	3364	3799	4515
25°	2846	3375	4314
30°	2298	2926	4071
35°	1710	2445	3836
40°	1086	1938	3608
45°	435	1421	3403
50°	189	906	3105
55°	146	468	2711
60°	102	320	2149
65°	75	318	1469
70°	76	279	675
75°	100	296	273
80°	149	332	293
85°	296	583	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3403 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	7.3
10°-20°	132.5	18.8
20°-30°	167.3	23.8
30°-40°	153.7	21.8
40°-50°	104.8	14.9
50°-60°	56.8	8.1
60°-70°	24.1	3.4
70°-80°	8.3	1.2
80°-90°	5.3	0.7
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°	351.1	49.9
0°-40°	504.8	71.7
0°-60°	666.4	94.6
0°-90°	704.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	704.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	538	546	547	551	558	50
15°	432	446	469	502	524	120
25°	300	319	355	410	454	137
35°	163	184	233	305	365	101
45°	36	57	117	207	279	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°	561.0	561.0	561.0	561.0	561.0
2.5°	552.8	559.5	555.8	557.3	558.8
5°	538.0	546.2	546.9	551.4	558.1
7.5°	517.2	526.8	532.8	543.9	554.3
10°	490.4	502.3	515.0	532.8	546.2
12.5°	462.2	474.8	493.4	518.7	536.5
15°	431.7	445.8	468.9	502.3	523.9
17.5°	399.8	415.4	442.9	482.3	509.8
20°	367.1	384.2	414.6	459.2	492.7
22.5°	333.6	351.5	384.9	435.4	474.8
25°	299.5	318.8	355.2	410.2	454.0
27.5°	266.8	284.6	324.7	384.9	433.2
30°	231.1	251.2	294.3	358.9	409.4
32.5°	198.4	217.7	263.0	332.2	387.1
35°	162.7	184.3	232.6	305.4	364.9
37.5°	129.3	150.1	202.9	280.1	343.3
40°	96.6	118.1	172.4	254.9	321.0
42.5°	64.6	87.7	143.4	228.9	300.2
45°	35.7	57.2	116.7	206.6	279.4
47.5°	18.6	31.2	91.4	184.3	257.1
50°	14.1	17.1	67.6	159.8	231.8
52.5°	11.9	12.6	46.1	135.2	206.6
55°	9.7	10.4	31.2	113.7	180.6
57.5°	7.4	8.2	22.3	92.9	151.6
60°	5.9	6.7	18.6	71.3	124.8
62.5°	4.5	5.2	17.8	52.8	98.1
65°	3.7	4.5	15.6	35.7	72.1
67.5°	3.0	4.5	13.4	23.0	48.3
70°	3.0	5.9	11.1	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	7.4	7.4	7.4	7.4
80°	3.0	6.7	6.7	6.7	5.9
82.5°	3.0	5.9	6.7	6.7	5.2
85°	3.0	5.9	5.9	5.9	4.5
87.5°	2.2	5.9	5.9	5.9	3.0
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	0.00	0.00	0.00	0.00	0.00	13.92	15.19	14.28	15.50	15.82
	3H	0.00	0.00	0.00	0.00	0.00	14.27	15.40	14.65	15.73	16.09
	4H	0.00	0.00	0.00	0.24	0.62	14.24	15.29	14.64	15.64	16.02
	6H	0.21	1.17	0.62	1.54	1.93	14.21	15.17	14.63	15.55	15.94
	8H	0.89	1.80	1.32	2.19	2.60	14.20	15.11	14.63	15.50	15.91
	12H	1.69	2.56	2.13	2.95	3.38	14.20	15.07	14.63	15.45	15.88
4H	2H	0.00	0.66	0.02	1.02	1.40	13.72	14.77	14.12	15.12	15.50
	3H	1.04	1.89	1.45	2.30	2.70	14.11	14.97	14.53	15.37	15.78
	4H	2.49	3.26	2.93	3.68	4.12	14.09	14.86	14.53	15.28	15.72
	6H	3.74	4.40	4.20	4.84	5.31	14.11	14.77	14.58	15.22	15.68
	8H	4.31	4.92	4.78	5.37	5.84	14.12	14.74	14.59	15.18	15.66
	12H	4.98	5.53	5.47	6.01	6.49	14.16	14.70	14.65	15.18	15.66
8H	4H	3.56	4.18	4.03	4.63	5.10	13.99	14.61	14.46	15.06	15.53
	6H	5.18	5.68	5.68	6.17	6.66	14.04	14.55	14.55	15.04	15.52
	8H	6.00	6.46	6.53	6.97	7.46	14.10	14.55	14.62	15.07	15.56
	12H	6.97	7.37	7.48	7.86	8.43	14.22	14.62	14.73	15.11	15.68
12H	4H	3.75	4.29	4.24	4.78	5.25	13.96	14.50	14.44	14.98	15.46
	6H	5.52	5.97	6.04	6.49	6.98	14.01	14.46	14.53	14.98	15.47
	8H	6.54	6.94	7.05	7.43	8.00	14.12	14.52	14.63	15.01	15.58