

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: P1060998

Luminaire Tested: S124RDR-H795D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060998
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H795D930-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

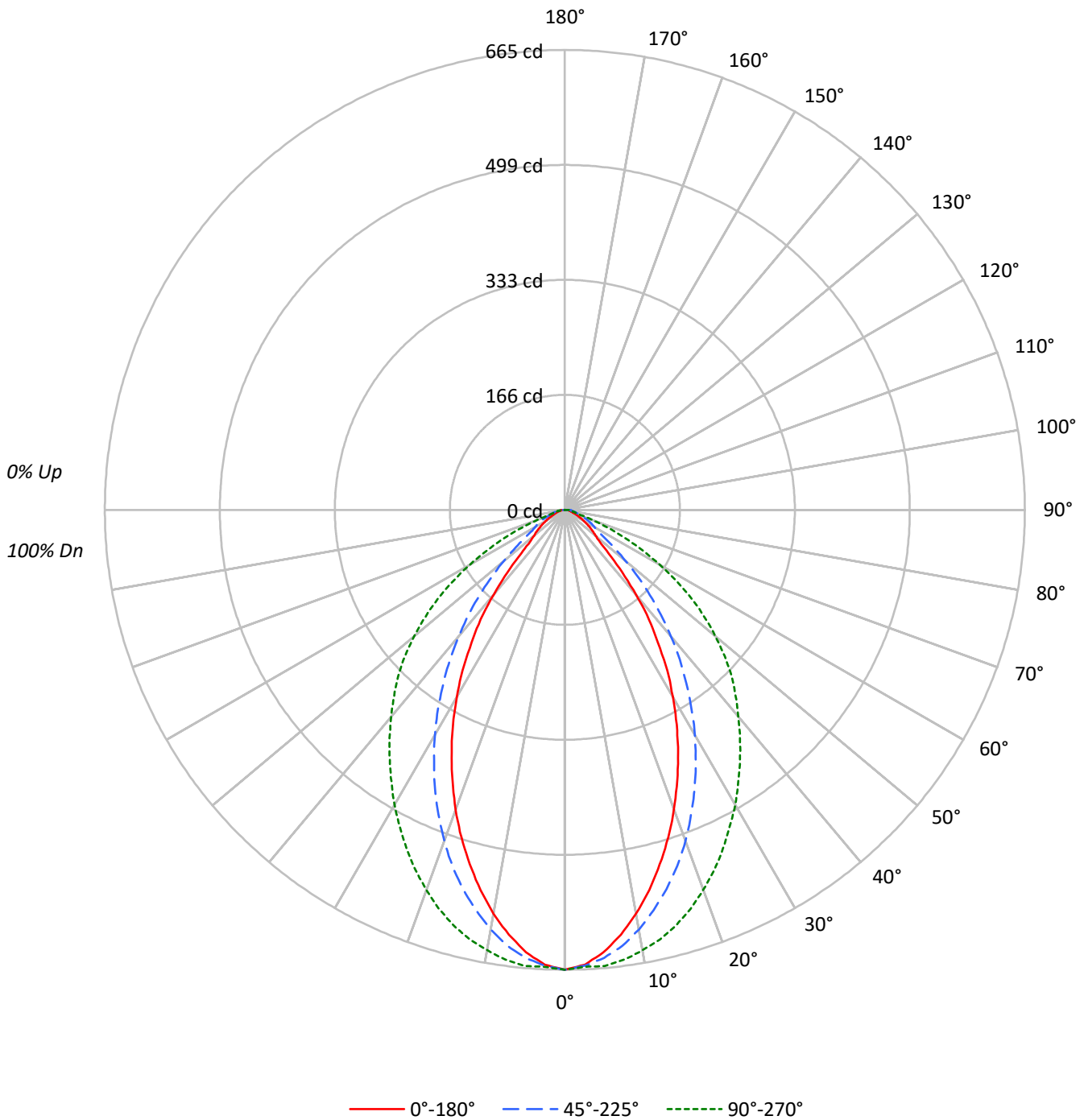
Lumens per Lamp: N/A
Luminaire Lumens: 941.3 lumens
Efficiency: N/A
Efficacy: 40.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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									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	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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79																												
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70																												
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63																												
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57																												
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51																												
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47																												
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43																												
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39																												
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5726	5726	5726
5°	5549	5620	5723
10°	5185	5386	5653
15°	4729	5061	5544
20°	4228	4671	5359
25°	3678	4221	5139
30°	3103	3739	4898
35°	2468	3218	4640
40°	1796	2681	4385
45°	1086	2118	4154
50°	777	1533	3802
55°	658	1037	3358
60°	537	844	2713
65°	424	758	1954
70°	355	637	1030
75°	323	592	519
80°	332	590	516
85°	445	879	583

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4154 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.2	6.5
10°-20°	160.4	17.0
20°-30°	208.1	22.1
30°-40°	200.3	21.3
40°-50°	149.0	15.8
50°-60°	91.6	9.7
60°-70°	45.0	4.8
70°-80°	17.6	1.9
80°-90°	8.0	0.9
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°	429.7	45.7
0°-40°	630.0	66.9
0°-60°	870.7	92.5
0°-90°	941.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	941.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	642	652	650	656	662	60
15°	530	548	568	602	622	148
25°	387	408	444	500	541	177
35°	235	257	306	383	441	147
45°	89	111	174	268	341	74
55°	44	45	69	158	224	39
65°	21	22	37	59	96	21
75°	10	17	18	16	16	11
85°	4	8	9	9	6	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	665.0	665.0	665.0	665.0	665.0
2.5°	658.4	665.8	659.8	660.6	661.3
5°	642.0	651.7	650.2	656.1	662.1
7.5°	619.7	630.9	636.1	647.9	656.1
10°	593.0	605.6	616.0	635.3	646.5
12.5°	563.2	578.1	593.0	619.0	636.1
15°	530.5	547.6	567.7	601.9	621.9
17.5°	497.1	514.2	540.2	579.6	604.9
20°	461.4	480.0	509.7	553.6	584.8
22.5°	424.3	444.3	477.0	526.8	564.0
25°	387.1	407.9	444.3	500.1	540.9
27.5°	350.0	370.0	409.4	471.8	516.4
30°	312.1	332.9	376.0	441.4	492.6
32.5°	275.7	295.0	341.1	412.4	466.6
35°	234.8	257.1	306.1	382.7	441.4
37.5°	199.9	219.9	272.7	353.0	416.1
40°	159.8	182.0	238.5	324.0	390.1
42.5°	122.6	144.9	205.8	295.0	365.6
45°	89.2	110.7	173.9	268.2	341.1
47.5°	67.6	80.3	142.7	242.2	313.6
50°	58.0	61.7	114.4	214.0	283.8
52.5°	51.3	52.8	89.2	185.8	254.1
55°	43.8	45.3	69.1	157.5	223.7
57.5°	37.2	37.9	55.7	130.8	191.0
60°	31.2	32.0	49.0	104.8	157.5
62.5°	26.0	26.8	43.8	81.0	125.6
65°	20.8	22.3	37.2	59.4	95.9
67.5°	17.1	20.1	31.2	41.6	66.9
70°	14.1	19.3	25.3	29.0	40.9
72.5°	11.9	17.8	21.5	20.8	20.1
75°	9.7	17.1	17.8	16.3	15.6
77.5°	8.2	14.9	14.9	13.4	12.6
80°	6.7	11.9	11.9	11.9	10.4
82.5°	5.9	9.7	10.4	10.4	8.2
85°	4.5	8.2	8.9	8.9	5.9
87.5°	3.0	7.4	8.2	7.4	4.5
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	5.85	7.19	6.22	7.50	7.82	15.02	16.36	15.38	16.67	16.99
	3H	6.96	8.15	7.34	8.48	8.85	15.52	16.72	15.90	17.04	17.41
	4H	7.48	8.59	7.88	8.94	9.32	15.54	16.65	15.95	17.00	17.39
	6H	7.92	8.94	8.33	9.31	9.70	15.55	16.58	15.97	16.95	17.34
	8H	8.10	9.07	8.53	9.46	9.87	15.56	16.53	15.99	16.92	17.32
	12H	8.29	9.21	8.72	9.59	10.02	15.56	16.49	15.99	16.87	17.30
4H	2H	7.00	8.11	7.40	8.46	8.84	14.91	16.02	15.31	16.37	16.75
	3H	8.34	9.25	8.75	9.65	10.05	15.50	16.41	15.91	16.81	17.21
	4H	9.07	9.88	9.51	10.30	10.75	15.56	16.37	15.99	16.79	17.23
	6H	9.68	10.39	10.15	10.83	11.30	15.63	16.34	16.09	16.78	17.25
	8H	9.92	10.58	10.39	11.03	11.50	15.66	16.32	16.13	16.77	17.24
	12H	10.16	10.74	10.65	11.23	11.70	15.70	16.28	16.19	16.77	17.24
8H	4H	9.54	10.19	10.01	10.64	11.11	15.52	16.17	15.98	16.62	17.09
	6H	10.39	10.93	10.89	11.42	11.90	15.64	16.18	16.14	16.68	17.16
	8H	10.80	11.28	11.32	11.79	12.29	15.73	16.21	16.25	16.72	17.22
	12H	11.22	11.65	11.74	12.14	12.71	15.85	16.27	16.36	16.77	17.34
12H	4H	9.59	10.17	10.08	10.66	11.13	15.49	16.07	15.97	16.55	17.03
	6H	10.52	11.01	11.04	11.52	12.01	15.62	16.11	16.14	16.62	17.11
	8H	11.04	11.47	11.56	11.97	12.54	15.76	16.19	16.27	16.68	17.25