

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060570

Luminaire Tested: S124RDRP-S795D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

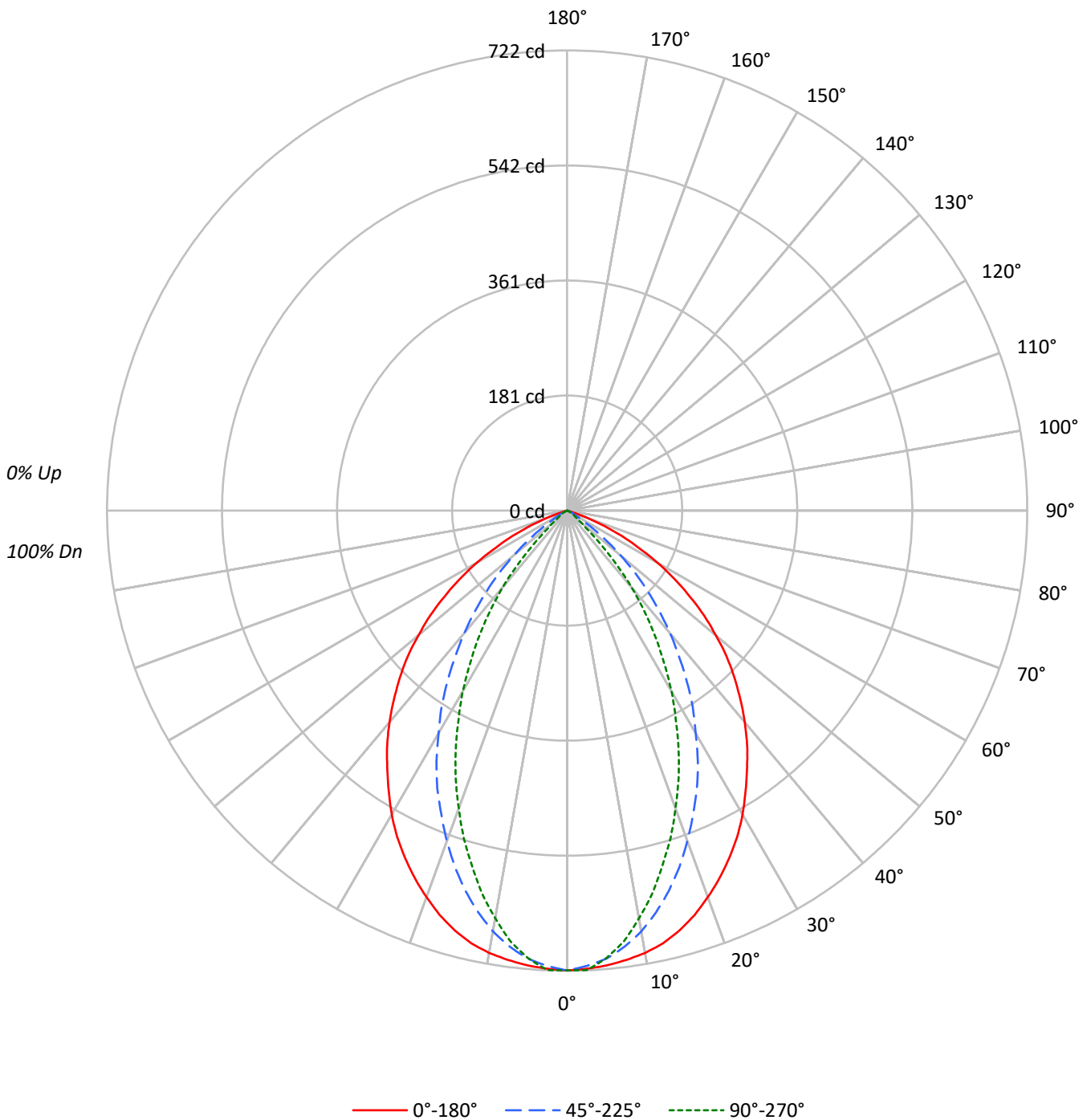
Lumens per Lamp: N/A
Luminaire Lumens: 942.1 lumens
Efficiency: N/A
Efficacy: 36.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6213	6213	6213
5°	6192	6102	6092
10°	6163	5862	5680
15°	6079	5502	5140
20°	5914	5055	4557
25°	5716	4577	3933
30°	5474	4012	3255
35°	5173	3442	2531
40°	4875	2825	1769
45°	4520	2171	876
50°	4078	1467	293
55°	3522	751	204
60°	2819	269	143
65°	1934	149	63
70°	866	78	53
75°	0	33	33
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4520 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	7.1
10°-20°	174.6	18.5
20°-30°	226.1	24.0
30°-40°	214.8	22.8
40°-50°	152.1	16.1
50°-60°	78.1	8.3
60°-70°	27.3	2.9
70°-80°	2.3	0.2
80°-90°	0.0	0.0
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°	467.4	49.6
0°-40°	682.2	72.4
0°-60°	912.4	96.9
0°-90°	942.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	942.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	716	717	706	706	705	68
15°	682	661	617	588	577	192
25°	602	555	482	431	414	277
35°	492	420	327	264	241	308
45°	371	286	178	102	72	286
55°	235	154	50	15	14	210
65°	95	46	7	4	3	94
75°	0	1	1	1	1	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	721.5	721.5	721.5	721.5	721.5
2.5°	719.4	721.5	715.2	720.5	721.5
5°	716.3	717.3	705.9	705.9	704.8
7.5°	711.1	709.0	690.2	682.9	681.9
10°	704.8	697.5	670.4	654.8	649.6
12.5°	695.4	681.9	645.4	622.5	616.2
15°	681.9	661.0	617.2	588.0	576.6
17.5°	665.2	638.1	586.0	550.5	539.0
20°	645.4	611.0	551.6	511.9	497.3
22.5°	624.5	584.9	516.1	471.3	456.7
25°	601.6	554.7	481.7	430.6	413.9
27.5°	577.6	522.4	444.2	391.0	369.1
30°	550.5	490.0	403.5	348.2	327.4
32.5°	521.3	454.6	367.0	307.6	282.6
35°	492.1	420.2	327.4	263.8	240.8
37.5°	464.0	387.9	287.8	221.0	199.1
40°	433.7	352.4	251.3	182.5	157.4
42.5°	402.5	318.0	213.7	142.8	115.7
45°	371.2	285.7	178.3	102.2	71.9
47.5°	339.9	251.3	143.9	64.6	38.6
50°	304.4	217.9	109.5	34.4	21.9
52.5°	271.1	186.6	78.2	19.8	16.7
55°	234.6	154.3	50.0	14.6	13.6
57.5°	200.2	123.0	28.2	11.5	10.4
60°	163.7	94.9	15.6	9.4	8.3
62.5°	127.2	68.8	10.4	6.3	5.2
65°	94.9	45.9	7.3	4.2	3.1
67.5°	62.6	26.1	5.2	2.1	2.1
70°	34.4	12.5	3.1	2.1	2.1
72.5°	12.5	4.2	2.1	1.0	1.0
75°	0.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	14.87	16.13	15.24	16.44	16.76	0.00	0.00	0.00	0.00	0.00
	3H	15.15	16.26	15.53	16.59	16.95	0.00	0.00	0.00	0.00	0.00
	4H	15.08	16.10	15.48	16.45	16.84	0.00	0.00	0.00	0.00	0.00
	6H	14.99	15.93	15.41	16.30	16.69	0.00	0.00	0.00	0.00	0.00
	8H	14.94	15.83	15.37	16.22	16.63	0.00	0.00	0.00	0.00	0.00
	12H	14.90	15.74	15.33	16.13	16.56	0.00	0.00	0.00	0.00	0.00
4H	2H	14.65	15.67	15.05	16.02	16.41	0.00	0.00	0.00	0.00	0.00
	3H	14.93	15.76	15.35	16.16	16.57	0.00	0.00	0.00	0.00	0.00
	4H	14.84	15.57	15.27	15.99	16.44	0.00	0.00	0.00	0.00	0.00
	6H	14.75	15.38	15.22	15.83	16.30	0.00	0.00	0.00	0.00	0.00
	8H	14.69	15.28	15.16	15.73	16.20	0.00	0.00	0.00	0.00	0.00
	12H	14.64	15.15	15.13	15.64	16.11	0.00	0.00	0.00	0.00	0.00
8H	4H	14.69	15.28	15.16	15.73	16.20	0.00	0.00	0.00	0.00	0.00
	6H	14.58	15.06	15.09	15.56	16.04	0.00	0.00	0.00	0.00	0.00
	8H	14.51	14.94	15.04	15.46	15.95	0.00	0.00	0.00	0.00	0.00
	12H	14.46	14.84	14.98	15.34	15.91	0.00	0.00	0.00	0.00	0.00
12H	4H	14.64	15.15	15.13	15.64	16.11	0.00	0.00	0.00	0.00	0.00
	6H	14.51	14.94	15.04	15.46	15.95	0.00	0.00	0.00	0.00	0.00
	8H	14.46	14.84	14.98	15.34	15.91	0.00	0.00	0.00	0.00	0.00