

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: P1060300

Luminaire Tested: S124RDRP-S1195D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060300
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-S1195D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

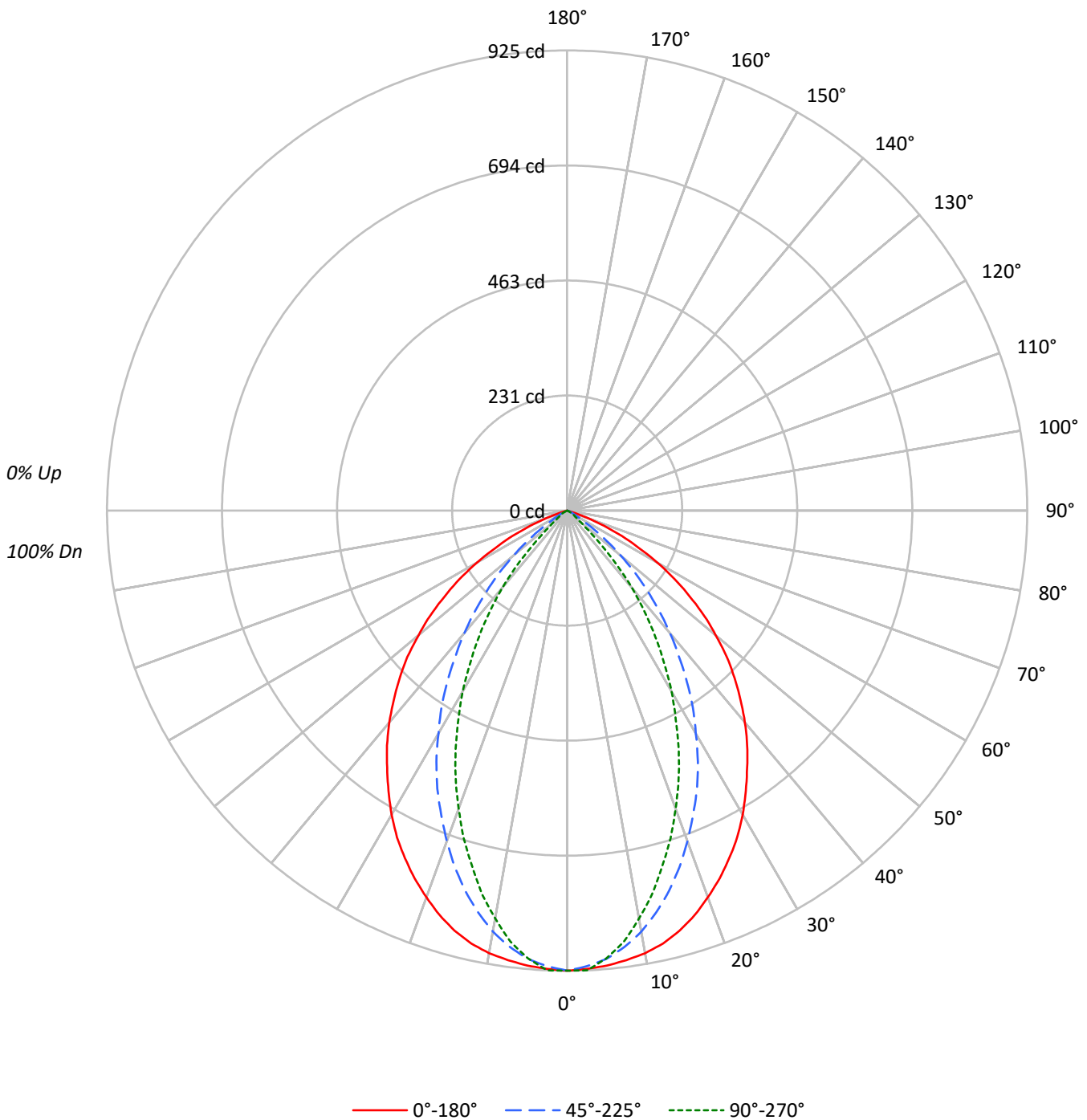
Lumens per Lamp: N/A
Luminaire Lumens: 1207.6 lumens
Efficiency: N/A
Efficacy: 28.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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°	7964	7964	7964
5°	7936	7821	7809
10°	7899	7514	7280
15°	7792	7053	6588
20°	7581	6479	5842
25°	7326	5866	5041
30°	7016	5143	4172
35°	6631	4411	3245
40°	6250	3621	2268
45°	5794	2783	1123
50°	5227	1880	376
55°	4514	962	261
60°	3613	344	184
65°	2478	192	82
70°	1110	101	68
75°	0	43	43
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5794 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	7.1
10°-20°	223.9	18.5
20°-30°	289.8	24.0
30°-40°	275.4	22.8
40°-50°	195.0	16.1
50°-60°	100.1	8.3
60°-70°	35.0	2.9
70°-80°	3.0	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°	599.1	49.6
0°-40°	874.4	72.4
0°-60°	1169.6	96.9
0°-90°	1207.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1207.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	925	925	925	925	925	
5°	918	920	905	905	903	87
15°	874	847	791	754	739	246
25°	771	711	617	552	531	355
35°	631	539	420	338	309	395
45°	476	366	228	131	92	366
55°	301	198	64	19	17	269
65°	122	59	9	5	4	121
75°	0	1	1	1	1	10
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	924.8	924.8	924.8	924.8	924.8
2.5°	922.1	924.8	916.8	923.5	924.8
5°	918.1	919.5	904.8	904.8	903.4
7.5°	911.4	908.8	884.7	875.4	874.0
10°	903.4	894.1	859.3	839.3	832.6
12.5°	891.4	874.0	827.3	797.8	789.8
15°	874.0	847.3	791.2	753.7	739.0
17.5°	852.6	817.9	751.1	705.6	690.9
20°	827.3	783.1	707.0	656.2	637.5
22.5°	800.5	749.7	661.5	604.1	585.4
25°	771.1	711.0	617.4	551.9	530.6
27.5°	740.4	669.6	569.3	501.2	473.1
30°	705.6	628.1	517.2	446.4	419.6
32.5°	668.2	582.7	470.4	394.2	362.2
35°	630.8	538.6	419.6	338.1	308.7
37.5°	594.7	497.2	368.9	283.3	255.3
40°	556.0	451.7	322.1	233.9	201.8
42.5°	515.9	407.6	274.0	183.1	148.3
45°	475.8	366.2	228.5	131.0	92.2
47.5°	435.7	322.1	184.4	82.9	49.4
50°	390.2	279.3	140.3	44.1	28.1
52.5°	347.5	239.2	100.2	25.4	21.4
55°	300.7	197.8	64.1	18.7	17.4
57.5°	256.6	157.7	36.1	14.7	13.4
60°	209.8	121.6	20.0	12.0	10.7
62.5°	163.0	88.2	13.4	8.0	6.7
65°	121.6	58.8	9.4	5.3	4.0
67.5°	80.2	33.4	6.7	2.7	2.7
70°	44.1	16.0	4.0	2.7	2.7
72.5°	16.0	5.3	2.7	1.3	1.3
75°	0.0	1.3	1.3	1.3	1.3
77.5°	0.0	0.0	0.0	0.0	1.3
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	15.74	16.99	16.10	17.31	17.62	0.00	0.00	0.00	0.00	0.29
	3H	16.02	17.12	16.40	17.45	17.82	0.00	0.00	0.00	0.00	0.29
	4H	15.94	16.96	16.34	17.31	17.70	0.00	0.00	0.00	0.00	0.23
	6H	15.85	16.79	16.27	17.16	17.56	0.00	0.00	0.00	0.00	0.12
	8H	15.81	16.69	16.24	17.08	17.49	0.00	0.00	0.00	0.00	0.05
	12H	15.76	16.61	16.19	16.99	17.42	0.00	0.00	0.00	0.00	0.00
4H	2H	15.51	16.54	15.91	16.89	17.27	0.00	0.00	0.00	0.25	0.63
	3H	15.79	16.62	16.21	17.03	17.43	0.00	0.00	0.00	0.25	0.65
	4H	15.70	16.44	16.14	16.86	17.30	0.00	0.00	0.00	0.15	0.59
	6H	15.61	16.24	16.08	16.69	17.16	0.00	0.00	0.00	0.01	0.48
	8H	15.55	16.14	16.02	16.59	17.06	0.00	0.00	0.00	0.00	0.38
	12H	15.50	16.02	15.99	16.50	16.98	0.00	0.00	0.00	0.00	0.29
8H	4H	15.55	16.14	16.02	16.59	17.06	0.00	0.00	0.00	0.09	0.56
	6H	15.44	15.92	15.95	16.42	16.90	0.00	0.00	0.00	0.00	0.42
	8H	15.38	15.81	15.90	16.32	16.82	0.00	0.00	0.00	0.00	0.34
	12H	15.33	15.71	15.84	16.20	16.78	0.00	0.00	0.00	0.00	0.30
12H	4H	15.50	16.02	15.99	16.50	16.98	0.00	0.00	0.00	0.00	0.48
	6H	15.38	15.81	15.90	16.32	16.82	0.00	0.00	0.00	0.00	0.34
	8H	15.33	15.71	15.84	16.20	16.78	0.00	0.00	0.00	0.00	0.30