

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: P1060469

Luminaire Tested: S124RDRP-S575D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060469
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

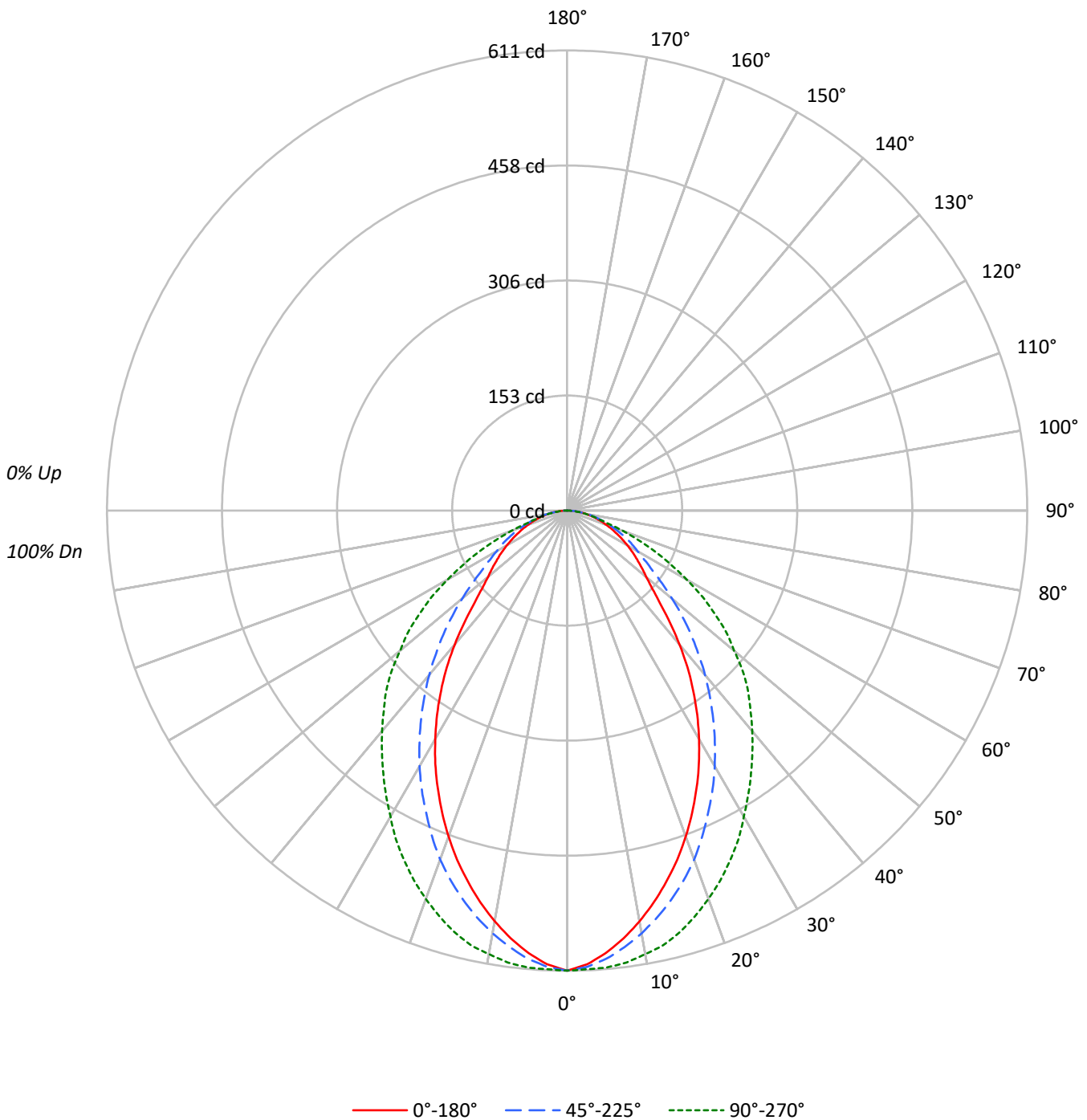
Lumens per Lamp: N/A
Luminaire Lumens: 1112.0 lumens
Efficiency: N/A
Efficacy: 56.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5260	5260	5260
5°	5097	5164	5263
10°	4842	4982	5229
15°	4544	4766	5165
20°	4219	4518	5028
25°	3863	4210	4867
30°	3482	3896	4666
35°	3070	3554	4476
40°	2612	3203	4296
45°	2121	2830	4141
50°	1835	2435	3877
55°	1701	2067	3596
60°	1588	1863	3153
65°	1487	1748	2622
70°	1387	1611	1984
75°	1321	1491	1427
80°	1240	1364	1205
85°	1136	1265	948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4141 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	5.1
10°-20°	151.6	13.6
20°-30°	207.0	18.6
30°-40°	216.8	19.5
40°-50°	187.7	16.9
50°-60°	141.0	12.7
60°-70°	90.9	8.2
70°-80°	46.6	4.2
80°-90°	13.9	1.3
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°	415.0	37.3
0°-40°	631.8	56.8
0°-60°	960.5	86.4
0°-90°	1112.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1112.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	611	611	611	611	611	
5°	590	599	597	602	609	55
15°	510	522	535	559	579	143
25°	407	422	443	478	512	187
35°	292	309	338	383	426	182
45°	174	192	232	289	340	137
55°	113	117	138	197	240	102
65°	73	74	86	104	129	73
75°	40	44	45	44	43	42
85°	12	13	13	12	10	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	610.8	610.8	610.8	610.8	610.8
2.5°	603.1	610.8	606.3	607.6	609.5
5°	589.7	598.7	597.4	601.9	608.9
7.5°	573.0	582.6	584.6	594.8	605.1
10°	553.8	564.7	569.8	585.2	598.0
12.5°	532.7	544.2	553.2	572.4	591.0
15°	509.7	522.5	534.6	559.0	579.4
17.5°	486.0	498.8	514.8	541.7	564.7
20°	460.4	474.4	493.0	521.2	548.7
22.5°	434.1	448.8	468.7	499.4	531.4
25°	406.6	421.9	443.1	477.6	512.2
27.5°	379.0	394.4	418.1	454.6	492.4
30°	350.2	366.2	391.8	431.5	469.3
32.5°	321.4	338.7	365.0	407.2	447.6
35°	292.0	308.6	338.1	382.9	425.8
37.5°	262.5	279.8	311.2	359.2	404.0
40°	232.4	250.3	284.9	335.5	382.2
42.5°	202.3	221.5	258.0	311.2	360.5
45°	174.2	192.1	232.4	289.4	340.0
47.5°	153.0	165.2	206.8	268.3	316.9
50°	137.0	143.4	181.8	245.2	289.4
52.5°	124.9	129.3	158.8	220.3	267.0
55°	113.3	117.2	137.7	196.6	239.5
57.5°	103.1	105.0	121.7	173.5	213.2
60°	92.2	94.1	108.2	148.5	183.1
62.5°	82.6	83.9	97.3	124.9	155.6
65°	73.0	74.3	85.8	103.7	128.7
67.5°	64.0	65.9	74.9	84.5	102.4
70°	55.1	58.9	64.0	68.5	78.8
72.5°	47.4	51.2	53.8	55.1	55.7
75°	39.7	44.2	44.8	44.2	42.9
77.5°	32.0	35.9	35.9	34.6	33.3
80°	25.0	28.2	27.5	26.3	24.3
82.5°	18.6	20.5	19.8	18.6	16.6
85°	11.5	13.4	12.8	12.2	9.6
87.5°	5.8	7.7	7.0	6.4	3.8
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	12.20	13.68	12.57	14.00	14.31	15.97	17.46	16.34	17.77	18.08
	3H	13.85	15.18	14.23	15.51	15.87	17.09	18.42	17.46	18.74	19.11
	4H	14.53	15.77	14.93	16.12	16.50	17.38	18.62	17.78	18.97	19.35
	6H	15.04	16.19	15.45	16.56	16.95	17.57	18.72	17.99	19.09	19.48
	8H	15.22	16.31	15.65	16.70	17.11	17.63	18.72	18.05	19.11	19.51
	12H	15.35	16.39	15.78	16.78	17.20	17.65	18.70	18.08	19.08	19.51
4H	2H	12.98	14.23	13.38	14.58	14.96	16.13	17.38	16.53	17.73	18.11
	3H	14.84	15.88	15.25	16.28	16.68	17.44	18.48	17.86	18.88	19.28
	4H	15.65	16.58	16.09	17.00	17.44	17.85	18.78	18.29	19.20	19.64
	6H	16.30	17.11	16.76	17.55	18.01	18.17	18.98	18.63	19.42	19.88
	8H	16.53	17.28	16.99	17.73	18.20	18.26	19.01	18.72	19.46	19.93
	12H	16.70	17.37	17.18	17.85	18.32	18.32	19.00	18.81	19.47	19.95
8H	4H	16.00	16.76	16.47	17.20	17.67	17.99	18.74	18.45	19.18	19.65
	6H	16.80	17.42	17.29	17.91	18.39	18.40	19.02	18.90	19.51	19.99
	8H	17.12	17.68	17.63	18.19	18.68	18.55	19.11	19.06	19.62	20.11
	12H	17.38	17.88	17.89	18.37	18.93	18.67	19.17	19.18	19.66	20.23
12H	4H	16.03	16.71	16.52	17.18	17.66	17.99	18.66	18.47	19.14	19.61
	6H	16.86	17.42	17.37	17.93	18.42	18.42	18.98	18.93	19.49	19.98
	8H	17.25	17.74	17.76	18.23	18.80	18.62	19.12	19.13	19.61	20.17