

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: P1060496

Luminaire Tested: S124RDRP-S575D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060496
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-S575D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

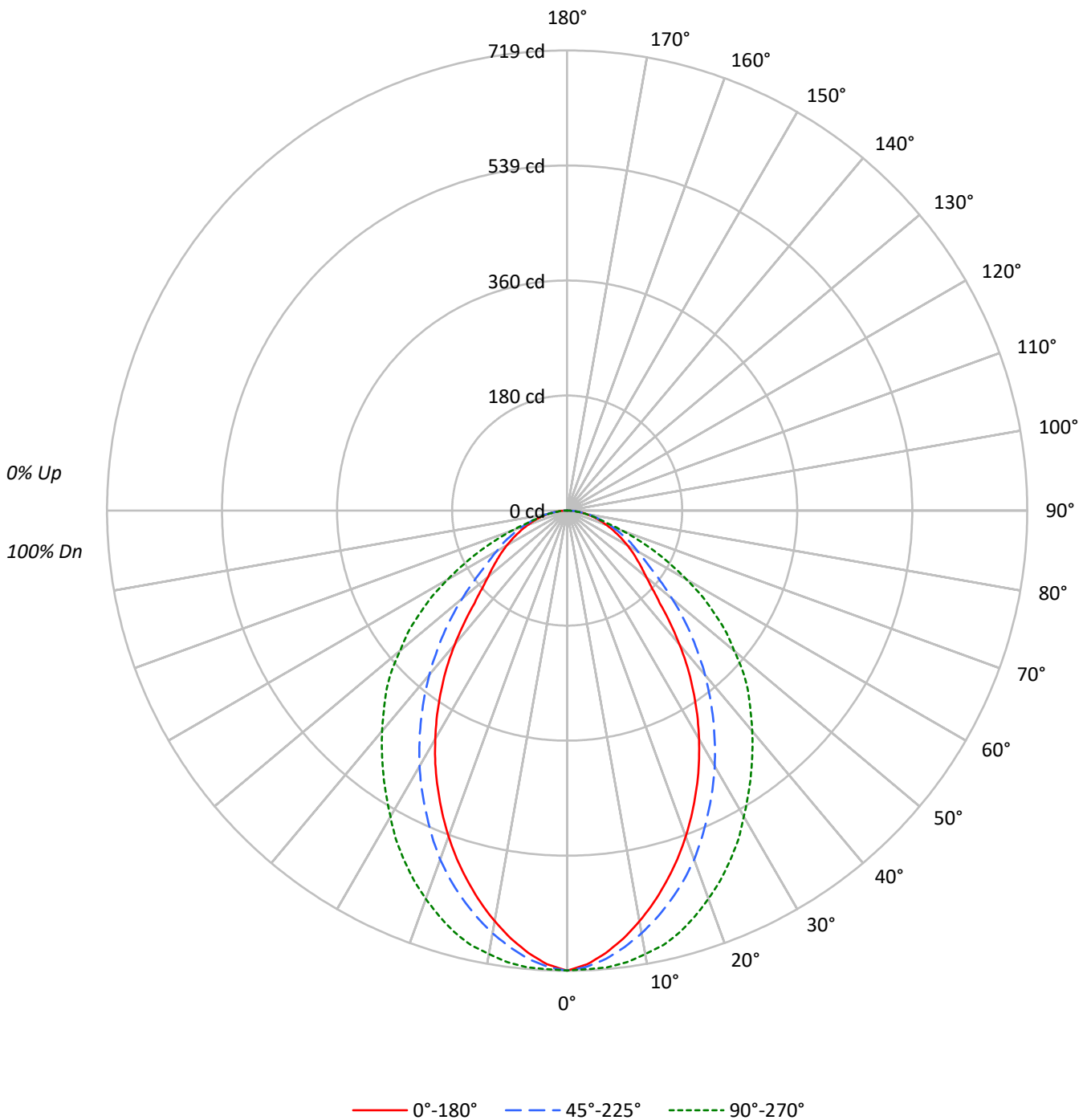
Lumens per Lamp: N/A
Luminaire Lumens: 1308.4 lumens
Efficiency: N/A
Efficacy: 66.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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					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°	6189	6189	6189
5°	5997	6076	6193
10°	5698	5863	6152
15°	5346	5607	6078
20°	4964	5316	5916
25°	4545	4953	5726
30°	4098	4584	5491
35°	3611	4182	5267
40°	3074	3768	5055
45°	2495	3331	4871
50°	2160	2867	4562
55°	2001	2432	4231
60°	1869	2192	3711
65°	1750	2056	3085
70°	1631	1896	2334
75°	1554	1753	1680
80°	1458	1607	1418
85°	1344	1492	1116

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4871 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	5.1
10°-20°	178.3	13.6
20°-30°	243.5	18.6
30°-40°	255.1	19.5
40°-50°	220.8	16.9
50°-60°	166.0	12.7
60°-70°	107.0	8.2
70°-80°	54.9	4.2
80°-90°	16.4	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°	488.2	37.3
0°-40°	743.4	56.8
0°-60°	1130.2	86.4
0°-90°	1308.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1308.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	694	704	703	708	716	65
15°	600	615	629	658	682	168
25°	478	496	521	562	603	220
35°	344	363	398	450	501	214
45°	205	226	274	340	400	162
55°	133	138	162	231	282	120
65°	86	87	101	122	151	85
75°	47	52	53	52	50	49
85°	14	16	15	14	11	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	718.7	718.7	718.7	718.7	718.7
2.5°	709.7	718.7	713.4	714.9	717.2
5°	693.8	704.4	702.9	708.1	716.4
7.5°	674.2	685.5	687.8	699.9	711.9
10°	651.6	664.5	670.5	688.6	703.6
12.5°	626.8	640.3	650.9	673.5	695.3
15°	599.7	614.7	629.0	657.7	681.8
17.5°	571.8	586.9	605.7	637.3	664.5
20°	541.7	558.2	580.1	613.2	645.6
22.5°	510.8	528.1	551.5	587.6	625.3
25°	478.4	496.5	521.3	562.0	602.7
27.5°	446.0	464.1	491.9	534.9	579.3
30°	412.1	430.9	461.0	507.8	552.2
32.5°	378.2	398.5	429.4	479.1	526.6
35°	343.5	363.1	397.8	450.5	501.0
37.5°	308.9	329.2	366.1	422.6	475.4
40°	273.5	294.6	335.2	394.8	449.7
42.5°	238.1	260.7	303.6	366.1	424.1
45°	204.9	226.0	273.5	340.5	400.0
47.5°	180.1	194.4	243.3	315.7	372.9
50°	161.2	168.8	214.0	288.5	340.5
52.5°	146.9	152.2	186.8	259.2	314.1
55°	133.3	137.9	162.0	231.3	281.8
57.5°	121.3	123.5	143.1	204.2	250.9
60°	108.5	110.7	127.3	174.8	215.5
62.5°	97.2	98.7	114.5	146.9	183.1
65°	85.9	87.4	100.9	122.0	151.4
67.5°	75.3	77.6	88.1	99.4	120.5
70°	64.8	69.3	75.3	80.6	92.7
72.5°	55.7	60.3	63.3	64.8	65.5
75°	46.7	52.0	52.7	52.0	50.5
77.5°	37.7	42.2	42.2	40.7	39.2
80°	29.4	33.1	32.4	30.9	28.6
82.5°	21.8	24.1	23.4	21.8	19.6
85°	13.6	15.8	15.1	14.3	11.3
87.5°	6.8	9.0	8.3	7.5	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	12.76	14.25	13.13	14.56	14.87	16.54	18.02	16.91	18.34	18.65
	3H	14.42	15.75	14.80	16.08	16.44	17.65	18.98	18.03	19.31	19.67
	4H	15.09	16.33	15.49	16.68	17.06	17.94	19.19	18.34	19.54	19.92
	6H	15.60	16.75	16.02	17.12	17.51	18.14	19.29	18.55	19.66	20.05
	8H	15.78	16.88	16.21	17.27	17.67	18.19	19.29	18.62	19.68	20.08
	12H	15.91	16.96	16.34	17.34	17.77	18.22	19.27	18.65	19.65	20.08
4H	2H	13.55	14.79	13.95	15.14	15.52	16.70	17.94	17.10	18.29	18.67
	3H	15.41	16.44	15.82	16.84	17.24	18.01	19.04	18.42	19.44	19.84
	4H	16.22	17.15	16.65	17.56	18.00	18.42	19.35	18.85	19.76	20.20
	6H	16.86	17.67	17.32	18.11	18.58	18.73	19.54	19.19	19.98	20.45
	8H	17.09	17.85	17.56	18.29	18.76	18.83	19.58	19.29	20.03	20.49
	12H	17.26	17.94	17.75	18.42	18.89	18.89	19.56	19.37	20.04	20.51
8H	4H	16.57	17.32	17.03	17.77	18.23	18.55	19.31	19.02	19.75	20.22
	6H	17.36	17.98	17.86	18.47	18.95	18.96	19.59	19.46	20.08	20.56
	8H	17.68	18.24	18.20	18.75	19.24	19.11	19.67	19.63	20.18	20.67
	12H	17.95	18.44	18.46	18.93	19.50	19.24	19.73	19.75	20.22	20.79
12H	4H	16.60	17.27	17.08	17.75	18.22	18.56	19.23	19.04	19.71	20.18
	6H	17.42	17.98	17.94	18.49	18.98	18.98	19.54	19.50	20.06	20.54
	8H	17.81	18.30	18.32	18.80	19.36	19.19	19.68	19.70	20.17	20.74