

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: P1060514

Luminaire Tested: S124RDRP-S575D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060514
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-S575D930-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, 90 CRI LEDS
Ballast/Driver: -

Summary

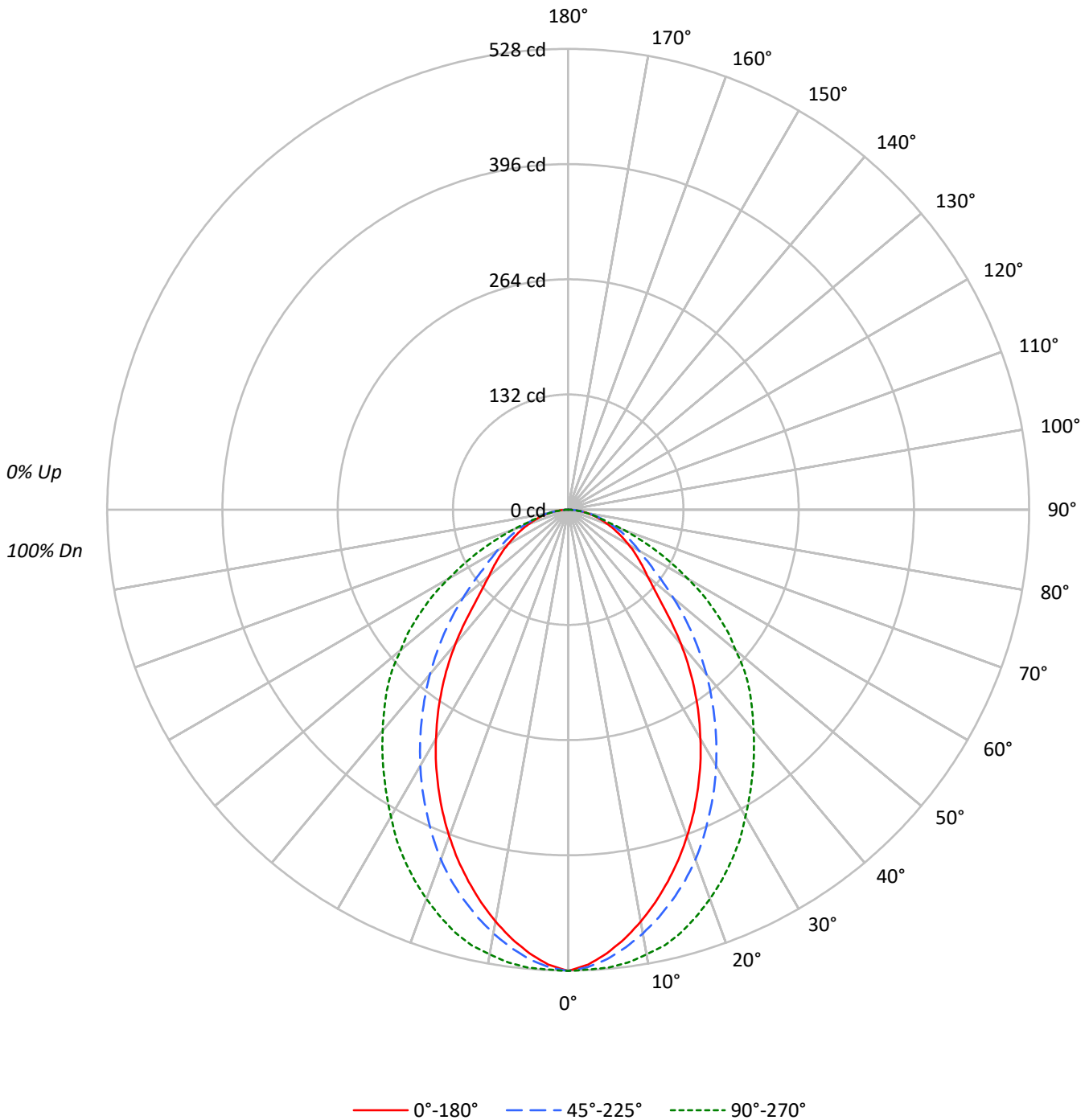
Lumens per Lamp: N/A
Luminaire Lumens: 961.9 lumens
Efficiency: N/A
Efficacy: 49.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4550	4550	4550
5°	4409	4466	4553
10°	4189	4310	4523
15°	3931	4123	4468
20°	3649	3908	4349
25°	3342	3642	4210
30°	3012	3370	4037
35°	2654	3074	3872
40°	2259	2771	3716
45°	1834	2448	3582
50°	1587	2107	3353
55°	1471	1788	3109
60°	1374	1612	2728
65°	1286	1512	2268
70°	1198	1395	1715
75°	1141	1291	1234
80°	1071	1180	1041
85°	988	1097	820

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3582 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.8	5.1
10°-20°	131.1	13.6
20°-30°	179.0	18.6
30°-40°	187.6	19.5
40°-50°	162.4	16.9
50°-60°	122.0	12.7
60°-70°	78.7	8.2
70°-80°	40.3	4.2
80°-90°	12.0	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°	358.9	37.3
0°-40°	546.5	56.8
0°-60°	830.9	86.4
0°-90°	961.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	961.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	510	518	517	521	527	48
15°	441	452	462	484	501	124
25°	352	365	383	413	443	161
35°	252	267	292	331	368	157
45°	151	166	201	250	294	119
55°	98	101	119	170	207	88
65°	63	64	74	90	111	63
75°	34	38	39	38	37	36
85°	10	12	11	10	8	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	528.4	528.4	528.4	528.4	528.4
2.5°	521.7	528.4	524.5	525.6	527.3
5°	510.1	517.8	516.7	520.6	526.7
7.5°	495.7	504.0	505.7	514.5	523.4
10°	479.1	488.5	492.9	506.2	517.3
12.5°	460.8	470.8	478.5	495.1	511.2
15°	440.9	451.9	462.5	483.5	501.2
17.5°	420.4	431.4	445.3	468.5	488.5
20°	398.2	410.4	426.5	450.8	474.6
22.5°	375.5	388.2	405.4	432.0	459.7
25°	351.7	365.0	383.3	413.2	443.1
27.5°	327.9	341.2	361.7	393.2	425.9
30°	302.9	316.8	338.9	373.3	406.0
32.5°	278.0	293.0	315.7	352.2	387.1
35°	252.5	266.9	292.4	331.2	368.3
37.5°	227.1	242.0	269.2	310.7	349.5
40°	201.0	216.6	246.5	290.2	330.6
42.5°	175.0	191.6	223.2	269.2	311.8
45°	150.6	166.2	201.0	250.3	294.1
47.5°	132.4	142.9	178.9	232.1	274.1
50°	118.5	124.1	157.3	212.1	250.3
52.5°	108.0	111.9	137.4	190.5	230.9
55°	98.0	101.4	119.1	170.0	207.1
57.5°	89.2	90.8	105.2	150.1	184.4
60°	79.8	81.4	93.6	128.5	158.4
62.5°	71.4	72.6	84.2	108.0	134.6
65°	63.1	64.2	74.2	89.7	111.3
67.5°	55.4	57.0	64.8	73.1	88.6
70°	47.6	51.0	55.4	59.3	68.1
72.5°	41.0	44.3	46.5	47.6	48.2
75°	34.3	38.2	38.8	38.2	37.1
77.5°	27.7	31.0	31.0	29.9	28.8
80°	21.6	24.4	23.8	22.7	21.0
82.5°	16.1	17.7	17.2	16.1	14.4
85°	10.0	11.6	11.1	10.5	8.3
87.5°	5.0	6.6	6.1	5.5	3.3
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	11.70	13.18	12.06	13.49	13.81	15.47	16.95	15.84	17.27	17.58
	3H	13.35	14.68	13.73	15.01	15.37	16.58	17.91	16.96	18.24	18.60
	4H	14.02	15.27	14.42	15.62	15.99	16.87	18.12	17.27	18.47	18.85
	6H	14.53	15.68	14.95	16.05	16.44	17.07	18.22	17.48	18.59	18.98
	8H	14.72	15.81	15.14	16.20	16.60	17.12	18.22	17.55	18.61	19.01
	12H	14.84	15.89	15.27	16.27	16.70	17.15	18.20	17.58	18.58	19.01
4H	2H	12.48	13.72	12.88	14.07	14.45	15.63	16.87	16.03	17.22	17.60
	3H	14.34	15.37	14.75	15.77	16.17	16.94	17.97	17.35	18.37	18.78
	4H	15.15	16.08	15.58	16.49	16.93	17.35	18.28	17.78	18.69	19.13
	6H	15.80	16.60	16.25	17.05	17.51	17.66	18.47	18.12	18.91	19.38
	8H	16.02	16.78	16.49	17.22	17.69	17.76	18.51	18.22	18.96	19.42
	12H	16.20	16.87	16.68	17.35	17.82	17.82	18.49	18.30	18.97	19.44
8H	4H	15.50	16.25	15.96	16.70	17.16	17.48	18.24	17.95	18.68	19.15
	6H	16.29	16.91	16.79	17.41	17.88	17.89	18.52	18.39	19.01	19.49
	8H	16.61	17.17	17.13	17.68	18.17	18.04	18.60	18.56	19.11	19.60
	12H	16.88	17.37	17.39	17.86	18.43	18.17	18.66	18.68	19.15	19.72
12H	4H	15.53	16.20	16.01	16.68	17.15	17.49	18.16	17.97	18.64	19.11
	6H	16.35	16.91	16.87	17.42	17.91	17.91	18.47	18.43	18.99	19.47
	8H	16.74	17.23	17.25	17.73	18.29	18.12	18.61	18.63	19.10	19.67