

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: P1060541

Luminaire Tested: S124RDRP-S575D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060541  
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-S575D950-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, 90 CRI LEDS  
Ballast/Driver: -

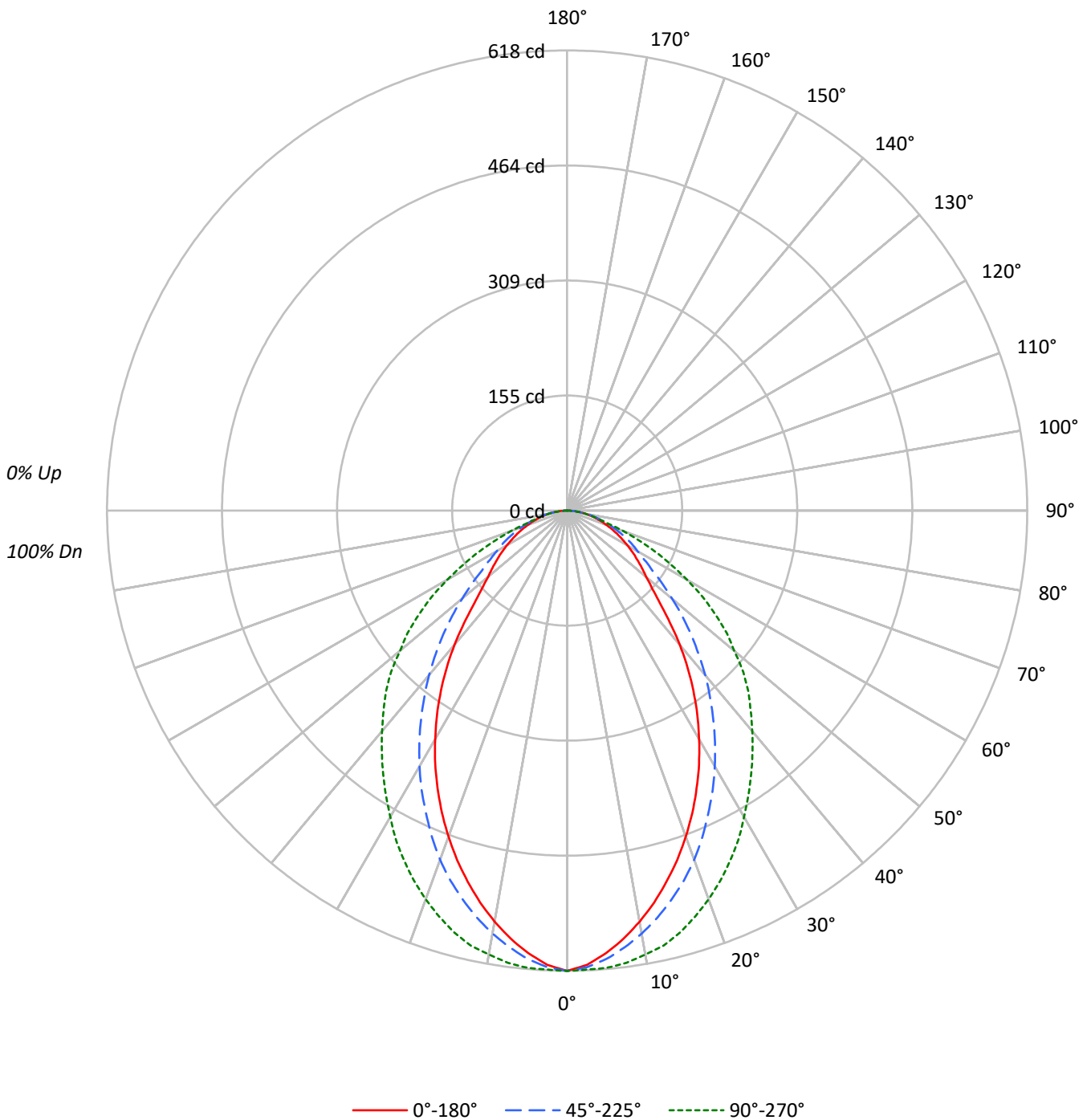
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1125.6 lumens  
Efficiency: N/A  
Efficacy: 57.4 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 (Ain): 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°	5323	5323	5323
5°	5160	5226	5327
10°	4902	5044	5293
15°	4599	4824	5229
20°	4270	4573	5090
25°	3910	4261	4925
30°	3525	3944	4723
35°	3106	3597	4531
40°	2644	3242	4349
45°	2147	2864	4190
50°	1858	2465	3924
55°	1722	2091	3639
60°	1607	1886	3191
65°	1506	1769	2655
70°	1402	1631	2007
75°	1337	1510	1444
80°	1255	1384	1220
85°	1156	1284	958

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4190 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.1	5.1
10°-20°	153.4	13.6
20°-30°	209.5	18.6
30°-40°	219.5	19.5
40°-50°	190.0	16.9
50°-60°	142.7	12.7
60°-70°	92.0	8.2
70°-80°	47.2	4.2
80°-90°	14.1	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°	420.0	37.3
0°-40°	639.5	56.8
0°-60°	972.2	86.4
0°-90°	1125.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1125.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	597	606	605	609	616	56
15°	516	529	541	566	586	145
25°	412	427	448	484	518	189
35°	296	312	342	388	431	184
45°	176	194	235	293	344	139
55°	115	119	139	199	242	103
65°	74	75	87	105	130	73
75°	40	45	45	45	43	42
85°	12	14	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°	618.2	618.2	618.2	618.2	618.2
2.5°	610.5	618.2	613.7	615.0	617.0
5°	596.9	605.9	604.6	609.2	616.3
7.5°	580.0	589.7	591.7	602.0	612.4
10°	560.6	571.6	576.8	592.3	605.3
12.5°	539.2	550.8	559.9	579.4	598.2
15°	515.9	528.8	541.1	565.8	586.5
17.5°	491.9	504.8	521.0	548.3	571.6
20°	466.0	480.2	499.0	527.5	555.4
22.5°	439.4	454.3	474.4	505.5	537.9
25°	411.5	427.1	448.5	483.5	518.4
27.5°	383.6	399.2	423.2	460.1	498.4
30°	354.5	370.7	396.6	436.8	475.0
32.5°	325.3	342.8	369.4	412.2	453.0
35°	295.5	312.4	342.2	387.5	431.0
37.5°	265.7	283.2	315.0	363.6	408.9
40°	235.2	253.4	288.4	339.6	386.9
42.5°	204.8	224.2	261.2	315.0	364.9
45°	176.3	194.4	235.2	292.9	344.1
47.5°	154.9	167.2	209.3	271.5	320.8
50°	138.7	145.2	184.0	248.2	292.9
52.5°	126.4	130.9	160.7	222.9	270.2
55°	114.7	118.6	139.3	199.0	242.4
57.5°	104.3	106.3	123.1	175.6	215.8
60°	93.3	95.3	109.5	150.3	185.3
62.5°	83.6	84.9	98.5	126.4	157.5
65°	73.9	75.2	86.8	105.0	130.3
67.5°	64.8	66.7	75.8	85.5	103.7
70°	55.7	59.6	64.8	69.3	79.7
72.5°	48.0	51.8	54.4	55.7	56.4
75°	40.2	44.7	45.4	44.7	43.4
77.5°	32.4	36.3	36.3	35.0	33.7
80°	25.3	28.5	27.9	26.6	24.6
82.5°	18.8	20.7	20.1	18.8	16.8
85°	11.7	13.6	13.0	12.3	9.7
87.5°	5.8	7.8	7.1	6.5	3.9
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	12.24	13.73	12.61	14.04	14.35	16.02	17.50	16.38	17.81	18.13
	3H	13.90	15.23	14.27	15.55	15.92	17.13	18.46	17.51	18.79	19.15
	4H	14.57	15.81	14.97	16.16	16.54	17.42	18.66	17.82	19.01	19.39
	6H	15.08	16.23	15.49	16.60	16.99	17.62	18.77	18.03	19.13	19.53
	8H	15.26	16.36	15.69	16.75	17.15	17.67	18.76	18.10	19.15	19.55
	12H	15.39	16.44	15.82	16.82	17.25	17.70	18.74	18.13	19.12	19.55
4H	2H	13.02	14.27	13.42	14.62	15.00	16.17	17.42	16.57	17.77	18.15
	3H	14.89	15.92	15.30	16.32	16.72	17.49	18.52	17.90	18.92	19.32
	4H	15.69	16.62	16.13	17.04	17.48	17.89	18.82	18.33	19.24	19.68
	6H	16.34	17.15	16.80	17.59	18.05	18.21	19.02	18.67	19.46	19.92
	8H	16.57	17.32	17.03	17.77	18.24	18.30	19.06	18.77	19.50	19.97
	12H	16.74	17.41	17.22	17.89	18.36	18.36	19.04	18.85	19.51	19.99
8H	4H	16.04	16.80	16.51	17.24	17.71	18.03	18.78	18.49	19.23	19.69
	6H	16.84	17.46	17.33	17.95	18.43	18.44	19.06	18.94	19.55	20.03
	8H	17.16	17.72	17.67	18.23	18.72	18.59	19.15	19.10	19.66	20.15
	12H	17.42	17.92	17.93	18.41	18.98	18.71	19.21	19.22	19.70	20.27
12H	4H	16.07	16.75	16.56	17.23	17.70	18.03	18.70	18.51	19.18	19.65
	6H	16.90	17.46	17.41	17.97	18.46	18.46	19.02	18.98	19.53	20.02
	8H	17.29	17.78	17.80	18.27	18.84	18.66	19.16	19.17	19.65	20.21