

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: P1060622

Luminaire Tested: S124RDRP-S795D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060622  
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-S795D950-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: -

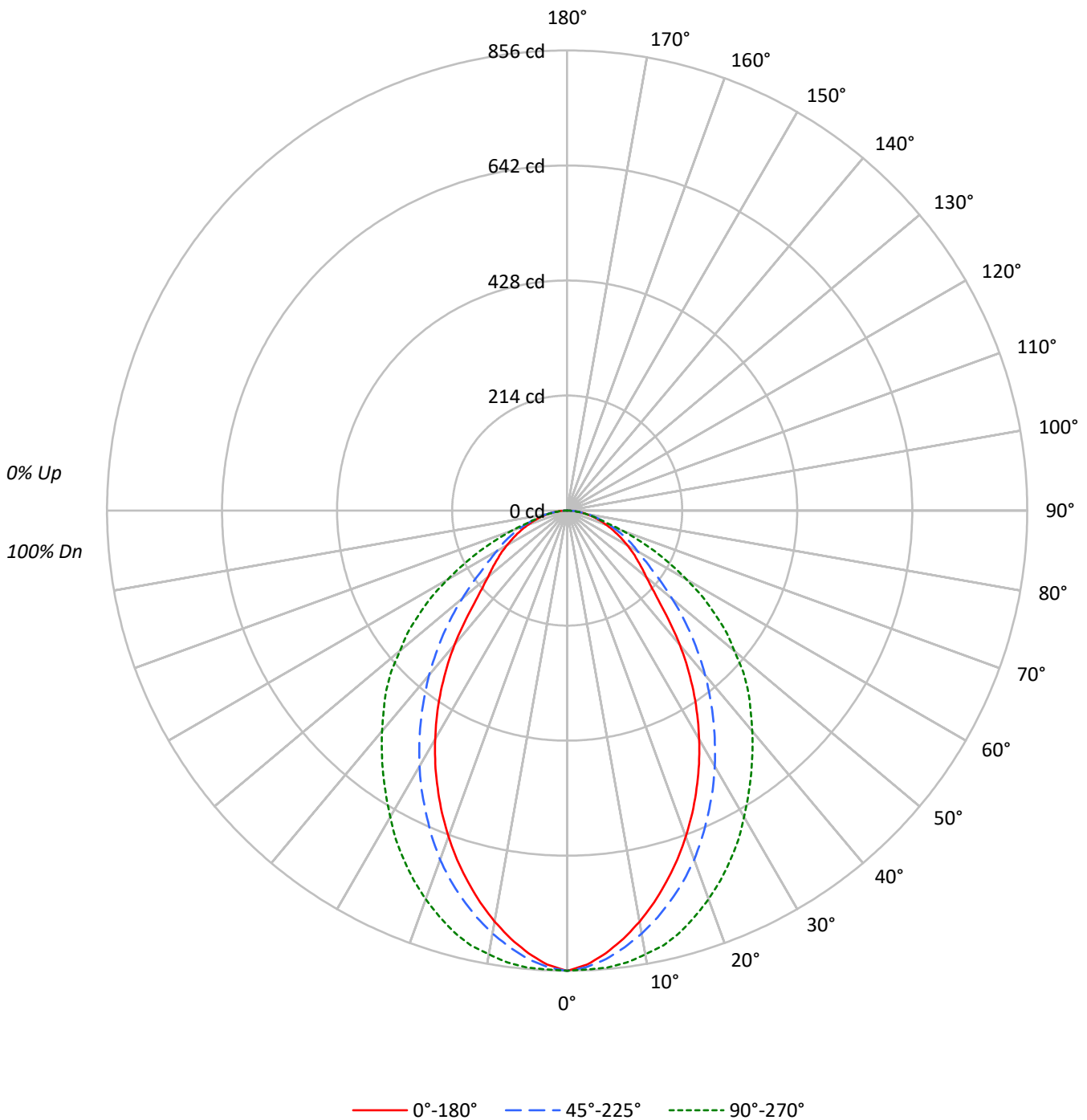
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1558.7 lumens  
Efficiency: N/A  
Efficacy: 60.4 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): 25.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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°	7372	7372	7372
5°	7144	7238	7377
10°	6788	6984	7329
15°	6368	6680	7241
20°	5912	6332	7048
25°	5415	5900	6821
30°	4881	5461	6541
35°	4302	4981	6274
40°	3662	4489	6023
45°	2973	3968	5803
50°	2572	3415	5434
55°	2384	2896	5038
60°	2225	2613	4421
65°	2084	2451	3676
70°	1944	2258	2780
75°	1850	2089	2000
80°	1736	1914	1691
85°	1601	1769	1334

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5803 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.1	5.1
10°-20°	212.5	13.6
20°-30°	290.1	18.6
30°-40°	303.9	19.5
40°-50°	263.1	16.9
50°-60°	197.7	12.7
60°-70°	127.5	8.2
70°-80°	65.4	4.2
80°-90°	19.5	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°	581.6	37.3
0°-40°	885.5	56.8
0°-60°	1346.3	86.4
0°-90°	1558.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1558.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	826	839	837	844	853	77
15°	714	732	749	783	812	200
25°	570	591	621	670	718	261
35°	409	433	474	537	597	255
45°	244	269	326	406	476	192
55°	159	164	193	276	336	143
65°	102	104	120	145	180	102
75°	56	62	63	62	60	59
85°	16	19	18	17	14	18
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	856.1	856.1	856.1	856.1	856.1
2.5°	845.4	856.1	849.8	851.6	854.3
5°	826.5	839.1	837.3	843.6	853.4
7.5°	803.2	816.6	819.3	833.7	848.1
10°	776.3	791.5	798.7	820.2	838.2
12.5°	746.6	762.8	775.4	802.3	828.3
15°	714.3	732.3	749.3	783.4	812.2
17.5°	681.1	699.1	721.5	759.2	791.5
20°	645.2	665.0	691.0	730.5	769.1
22.5°	608.4	629.1	656.9	700.0	744.8
25°	569.9	591.4	621.0	669.5	717.9
27.5°	531.3	552.8	586.0	637.2	690.1
30°	490.9	513.3	549.2	604.9	657.8
32.5°	450.5	474.7	511.5	570.8	627.3
35°	409.2	432.6	473.8	536.7	596.8
37.5°	367.9	392.2	436.1	503.4	566.3
40°	325.8	350.9	399.3	470.2	535.8
42.5°	283.6	310.5	361.7	436.1	505.2
45°	244.1	269.2	325.8	405.6	476.5
47.5°	214.5	231.5	289.9	376.0	444.2
50°	192.0	201.0	254.9	343.7	405.6
52.5°	175.0	181.3	222.6	308.7	374.2
55°	158.8	164.2	192.9	275.5	335.6
57.5°	144.5	147.2	170.5	243.2	298.8
60°	129.2	131.9	151.7	208.2	256.7
62.5°	115.8	117.6	136.4	175.0	218.1
65°	102.3	104.1	120.3	145.4	180.4
67.5°	89.7	92.4	105.0	118.5	143.6
70°	77.2	82.6	89.7	96.0	110.4
72.5°	66.4	71.8	75.4	77.2	78.1
75°	55.6	61.9	62.8	61.9	60.1
77.5°	44.9	50.3	50.3	48.5	46.7
80°	35.0	39.5	38.6	36.8	34.1
82.5°	26.0	28.7	27.8	26.0	23.3
85°	16.2	18.8	17.9	17.1	13.5
87.5°	8.1	10.8	9.9	9.0	5.4
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	13.37	14.86	13.74	15.17	15.49	17.15	18.63	17.51	18.94	19.26
	3H	15.03	16.36	15.41	16.69	17.05	18.26	19.59	18.64	19.92	20.28
	4H	15.70	16.94	16.10	17.29	17.67	18.55	19.80	18.95	20.15	20.52
	6H	16.21	17.36	16.62	17.73	18.12	18.75	19.90	19.16	20.27	20.66
	8H	16.39	17.49	16.82	17.88	18.28	18.80	19.90	19.23	20.29	20.69
	12H	16.52	17.57	16.95	17.95	18.38	18.83	19.88	19.26	20.26	20.69
4H	2H	14.16	15.40	14.56	15.75	16.13	17.31	18.55	17.71	18.90	19.28
	3H	16.02	17.05	16.43	17.45	17.85	18.62	19.65	19.03	20.05	20.45
	4H	16.83	17.76	17.26	18.17	18.61	19.03	19.95	19.46	20.37	20.81
	6H	17.47	18.28	17.93	18.72	19.18	19.34	20.15	19.80	20.59	21.05
	8H	17.70	18.46	18.17	18.90	19.37	19.43	20.19	19.90	20.63	21.10
	12H	17.87	18.55	18.36	19.03	19.50	19.50	20.17	19.98	20.65	21.12
8H	4H	17.18	17.93	17.64	18.37	18.84	19.16	19.91	19.62	20.36	20.83
	6H	17.97	18.59	18.47	19.08	19.56	19.57	20.19	20.07	20.69	21.16
	8H	18.29	18.85	18.81	19.36	19.85	19.72	20.28	20.24	20.79	21.28
	12H	18.55	19.05	19.06	19.54	20.11	19.85	20.34	20.36	20.83	21.40
12H	4H	17.21	17.88	17.69	18.36	18.83	19.16	19.84	19.65	20.32	20.79
	6H	18.03	18.59	18.55	19.10	19.59	19.59	20.15	20.11	20.66	21.15
	8H	18.42	18.91	18.93	19.40	19.97	19.79	20.29	20.30	20.78	21.35