

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: P1060594

Luminaire Tested: S124RDRP-S795D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060594  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D930-X4F0-XX-UDD-WVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

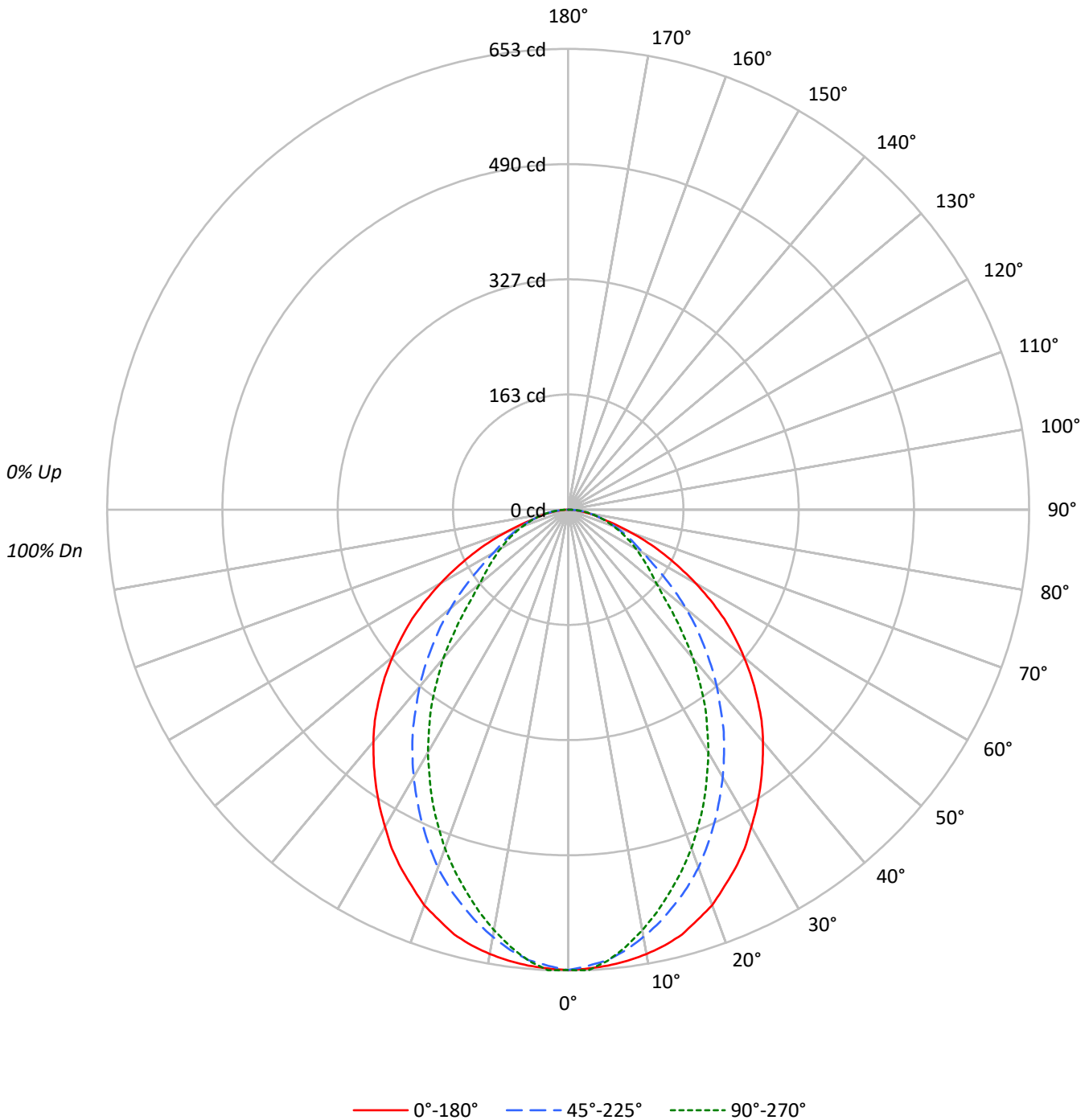
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1257.8 lumens  
Efficiency: N/A  
Efficacy: 48.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12  
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	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	107	104	100	97	99	97	94	96	93	91	92	90	88					86				
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76					74				
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66					64				
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58					56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52					50				
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46					44				
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42					40				
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38					36				
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35					33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32					30				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5617	5617	5617
5°	5606	5539	5546
10°	5590	5375	5288
15°	5556	5172	4988
20°	5464	4945	4678
25°	5324	4654	4326
30°	5160	4352	3948
35°	4995	4037	3546
40°	4825	3679	3094
45°	4612	3304	2585
50°	4354	2916	2188
55°	4051	2474	2025
60°	3591	2099	1913
65°	3060	1936	1811
70°	2392	1795	1717
75°	1634	1657	1657
80°	1408	1557	1597
85°	1215	1512	1670

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4612 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.7	4.8
10°-20°	164.8	13.1
20°-30°	228.8	18.2
30°-40°	245.3	19.5
40°-50°	217.3	17.3
50°-60°	163.7	13.0
60°-70°	106.0	8.4
70°-80°	54.4	4.3
80°-90°	16.7	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°	454.3	36.1
0°-40°	699.6	55.6
0°-60°	1080.6	85.9
0°-90°	1257.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1257.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	652	652	652	652	652	
5°	648	649	641	642	642	62
15°	623	609	580	566	560	175
25°	560	530	490	464	455	258
35°	475	432	384	350	337	297
45°	379	330	271	229	212	292
55°	270	225	165	139	135	240
65°	150	121	95	90	89	149
75°	49	51	50	50	50	58
85°	12	13	15	17	17	14
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	652.3	652.3	652.3	652.3	652.3
2.5°	650.8	653.1	646.9	651.5	653.1
5°	648.5	649.2	640.8	641.6	641.6
7.5°	644.6	643.1	629.3	625.5	624.7
10°	639.3	634.7	614.7	607.1	604.8
12.5°	632.4	623.9	598.6	587.9	583.3
15°	623.2	609.4	580.2	565.7	559.5
17.5°	609.4	591.7	561.1	542.7	535.8
20°	596.3	572.6	539.6	516.6	510.5
22.5°	577.9	552.7	515.1	490.6	482.9
25°	560.3	530.4	489.8	463.7	455.3
27.5°	541.2	507.4	463.7	436.1	425.4
30°	518.9	482.9	437.7	408.5	397.1
32.5°	497.5	459.1	410.8	378.7	366.4
35°	475.2	432.3	384.0	349.5	337.3
37.5°	452.2	407.0	354.1	320.4	304.3
40°	429.2	381.7	327.3	289.0	275.2
42.5°	405.5	355.7	299.7	259.8	242.2
45°	378.7	329.6	271.3	229.2	212.3
47.5°	352.6	304.3	245.3	199.3	184.0
50°	325.0	277.5	217.7	173.2	163.3
52.5°	297.4	249.9	190.9	153.3	148.7
55°	269.8	224.6	164.8	138.7	134.9
57.5°	239.1	198.5	141.8	125.7	122.6
60°	208.5	170.2	121.9	113.4	111.1
62.5°	178.6	145.6	108.1	101.2	99.6
65°	150.2	121.1	95.0	89.7	88.9
67.5°	122.6	99.6	82.8	79.7	78.2
70°	95.0	79.7	71.3	69.8	68.2
72.5°	70.5	64.4	60.6	59.8	59.0
75°	49.1	51.4	49.8	49.8	49.8
77.5°	39.1	39.9	40.6	41.4	40.6
80°	28.4	30.7	31.4	33.0	32.2
82.5°	19.9	21.5	23.8	24.5	25.3
85°	12.3	13.0	15.3	16.9	16.9
87.5°	5.4	6.1	7.7	9.2	10.0
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	16.43	17.93	16.80	18.25	18.56	13.00	14.50	13.36	14.81	15.13
	3H	17.64	18.98	18.02	19.31	19.67	14.69	16.04	15.07	16.37	16.73
	4H	17.95	19.21	18.35	19.55	19.93	15.37	16.63	15.77	16.98	17.36
	6H	18.15	19.31	18.56	19.68	20.07	15.92	17.08	16.33	17.45	17.84
	8H	18.21	19.31	18.63	19.70	20.11	16.14	17.25	16.57	17.64	18.04
	12H	18.24	19.30	18.67	19.68	20.11	16.31	17.37	16.74	17.75	18.18
4H	2H	16.58	17.84	16.98	18.18	18.56	13.66	14.92	14.06	15.27	15.65
	3H	17.98	19.02	18.39	19.42	19.82	15.57	16.61	15.98	17.01	17.42
	4H	18.40	19.35	18.84	19.76	20.20	16.37	17.31	16.80	17.73	18.17
	6H	18.73	19.55	19.19	19.99	20.45	17.06	17.88	17.52	18.32	18.78
	8H	18.83	19.59	19.29	20.04	20.50	17.33	18.10	17.80	18.54	19.01
	12H	18.90	19.58	19.38	20.06	20.53	17.56	18.25	18.05	18.72	19.20
8H	4H	18.53	19.30	19.00	19.74	20.21	16.69	17.45	17.15	17.90	18.36
	6H	18.95	19.59	19.45	20.08	20.56	17.52	18.15	18.01	18.64	19.12
	8H	19.11	19.68	19.63	20.19	20.68	17.88	18.45	18.40	18.96	19.45
	12H	19.24	19.74	19.75	20.23	20.80	18.22	18.72	18.73	19.21	19.78
12H	4H	18.54	19.22	19.02	19.70	20.17	16.72	17.40	17.20	17.88	18.35
	6H	18.98	19.55	19.49	20.06	20.55	17.58	18.15	18.09	18.66	19.14
	8H	19.19	19.69	19.70	20.18	20.75	18.01	18.51	18.52	19.00	19.57