

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: P1060992

Luminaire Tested: S124RDRP-H795D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060992  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-H795D927-X4F0-XX-UDD-WVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

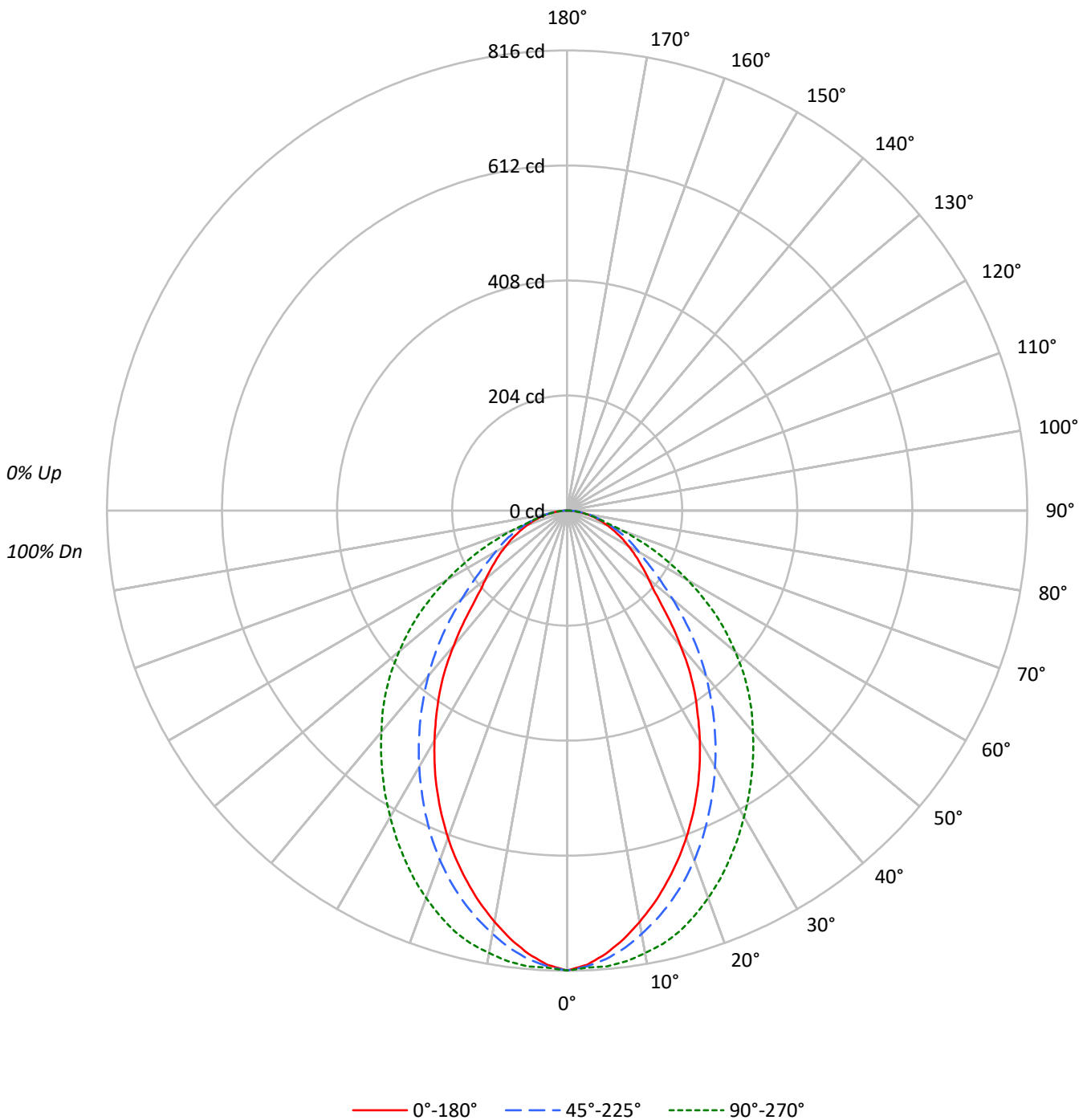
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1496.4 lumens  
Efficiency: N/A  
Efficacy: 63.7 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.5  
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

TEST NUMBER: P1060992

CATALOG NUMBER: S124RDRP-H795D927-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1060992

CATALOG NUMBER: S124RDRP-H795D927-X4F0-XX-UDD-WVL-W

**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					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75					75			
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65					65			
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57					57			
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50					50			
6	75	62	54	48	73	61	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	53	47	43	52	47	42	40					40			
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37					37			
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33					33			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31					31			

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

	0°	45°	90°
0°	7022	7022	7022
5°	6818	6900	7012
10°	6475	6664	6967
15°	6086	6382	6884
20°	5661	6044	6700
25°	5191	5644	6480
30°	4679	5217	6236
35°	4143	4773	6001
40°	3521	4308	5760
45°	2883	3806	5537
50°	2524	3267	5211
55°	2318	2816	4822
60°	2151	2535	4250
65°	2015	2382	3560
70°	1891	2180	2671
75°	1777	1993	1946
80°	1646	1825	1646
85°	1502	1778	1423

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5537 cd/sqm



TEST NUMBER: P1060992

CATALOG NUMBER: S124RDRP-H795D927-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.4	5.0
10°-20°	202.8	13.6
20°-30°	277.2	18.5
30°-40°	291.3	19.5
40°-50°	252.8	16.9
50°-60°	190.7	12.7
60°-70°	123.6	8.3
70°-80°	63.4	4.2
80°-90°	19.2	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°	555.3	37.1
0°-40°	846.7	56.6
0°-60°	1290.2	86.2
0°-90°	1496.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1496.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	789	800	798	805	811	74
15°	683	699	716	748	772	191
25°	546	566	594	639	682	250
35°	394	416	454	515	571	245
45°	237	259	312	390	455	186
55°	154	159	188	266	321	139
65°	99	101	117	142	175	98
75°	53	60	60	61	58	57
85°	15	19	18	17	14	17
90°	0	0	0	0	0	



TEST NUMBER: P1060992

CATALOG NUMBER: S124RDRP-H795D927-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	815.5	815.5	815.5	815.5	815.5
2.5°	806.1	816.3	809.0	810.5	811.2
5°	788.8	799.7	798.2	804.7	811.2
7.5°	766.5	779.4	782.3	795.3	806.1
10°	740.5	754.9	762.1	783.1	796.8
12.5°	713.0	727.5	740.5	767.2	786.7
15°	682.7	699.3	715.9	748.4	772.2
17.5°	651.0	668.3	689.2	724.6	752.7
20°	617.8	635.1	659.6	697.9	731.1
22.5°	582.4	601.9	627.9	669.0	708.0
25°	546.3	565.8	594.0	639.4	682.0
27.5°	508.8	529.0	559.3	609.8	655.3
30°	470.6	492.2	524.7	578.1	627.2
32.5°	431.6	454.7	489.3	546.3	599.7
35°	394.1	415.7	454.0	514.6	570.9
37.5°	355.1	376.7	417.9	483.5	542.0
40°	313.2	337.0	383.2	451.1	512.4
42.5°	274.2	298.1	347.9	420.0	484.3
45°	236.7	259.1	312.5	390.4	454.7
47.5°	207.9	223.7	277.1	361.6	422.9
50°	188.4	195.6	243.9	329.8	389.0
52.5°	171.0	176.8	213.6	298.1	355.8
55°	154.4	158.8	187.6	266.3	321.2
57.5°	140.0	142.2	164.5	234.6	283.6
60°	124.9	127.7	147.2	202.1	246.8
62.5°	112.6	114.0	132.1	171.0	210.0
65°	98.9	101.0	116.9	141.5	174.7
67.5°	86.6	90.2	101.0	115.5	137.8
70°	75.1	80.1	86.6	93.8	106.1
72.5°	64.2	70.0	73.6	76.5	74.3
75°	53.4	59.9	59.9	60.6	58.5
77.5°	43.3	49.1	48.4	47.6	44.7
80°	33.2	38.3	36.8	36.1	33.2
82.5°	24.5	28.1	26.7	26.0	22.4
85°	15.2	18.8	18.0	17.3	14.4
87.5°	7.2	10.8	10.1	9.4	6.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1060992

CATALOG NUMBER: S124RDRP-H795D927-X4F0-XX-UDD-WVL-W

**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	13.28	14.76	13.64	15.08	15.39	17.01	18.50	17.38	18.81	19.13
	3H	14.94	16.28	15.32	16.60	16.97	18.14	19.47	18.52	19.80	20.16
	4H	15.61	16.86	16.01	17.21	17.59	18.44	19.68	18.84	20.03	20.41
	6H	16.12	17.27	16.53	17.64	18.03	18.64	19.79	19.05	20.16	20.55
	8H	16.29	17.39	16.72	17.78	18.18	18.69	19.79	19.12	20.18	20.58
	12H	16.41	17.46	16.84	17.84	18.27	18.72	19.77	19.15	20.16	20.58
4H	2H	14.07	15.32	14.47	15.67	16.04	17.18	18.43	17.58	18.78	19.16
	3H	15.94	16.97	16.35	17.37	17.78	18.51	19.54	18.92	19.95	20.35
	4H	16.74	17.67	17.18	18.09	18.53	18.93	19.86	19.36	20.27	20.71
	6H	17.39	18.20	17.84	18.64	19.10	19.25	20.06	19.70	20.50	20.96
	8H	17.61	18.37	18.07	18.81	19.28	19.34	20.10	19.81	20.54	21.01
	12H	17.77	18.45	18.26	18.93	19.40	19.41	20.09	19.90	20.57	21.04
8H	4H	17.09	17.85	17.56	18.29	18.76	19.06	19.82	19.52	20.26	20.73
	6H	17.88	18.51	18.38	19.00	19.48	19.48	20.10	19.98	20.59	21.07
	8H	18.20	18.76	18.71	19.27	19.76	19.64	20.20	20.15	20.71	21.20
	12H	18.46	18.96	18.97	19.45	20.02	19.77	20.27	20.28	20.76	21.33
12H	4H	17.12	17.80	17.60	18.28	18.75	19.06	19.74	19.55	20.22	20.69
	6H	17.94	18.50	18.46	19.02	19.50	19.50	20.06	20.01	20.57	21.06
	8H	18.33	18.82	18.84	19.32	19.88	19.71	20.21	20.22	20.70	21.26