

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: P1060569

Luminaire Tested: S124RDRP-S795D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060569  
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-S795D840-X4F0-XX-UDD-WVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

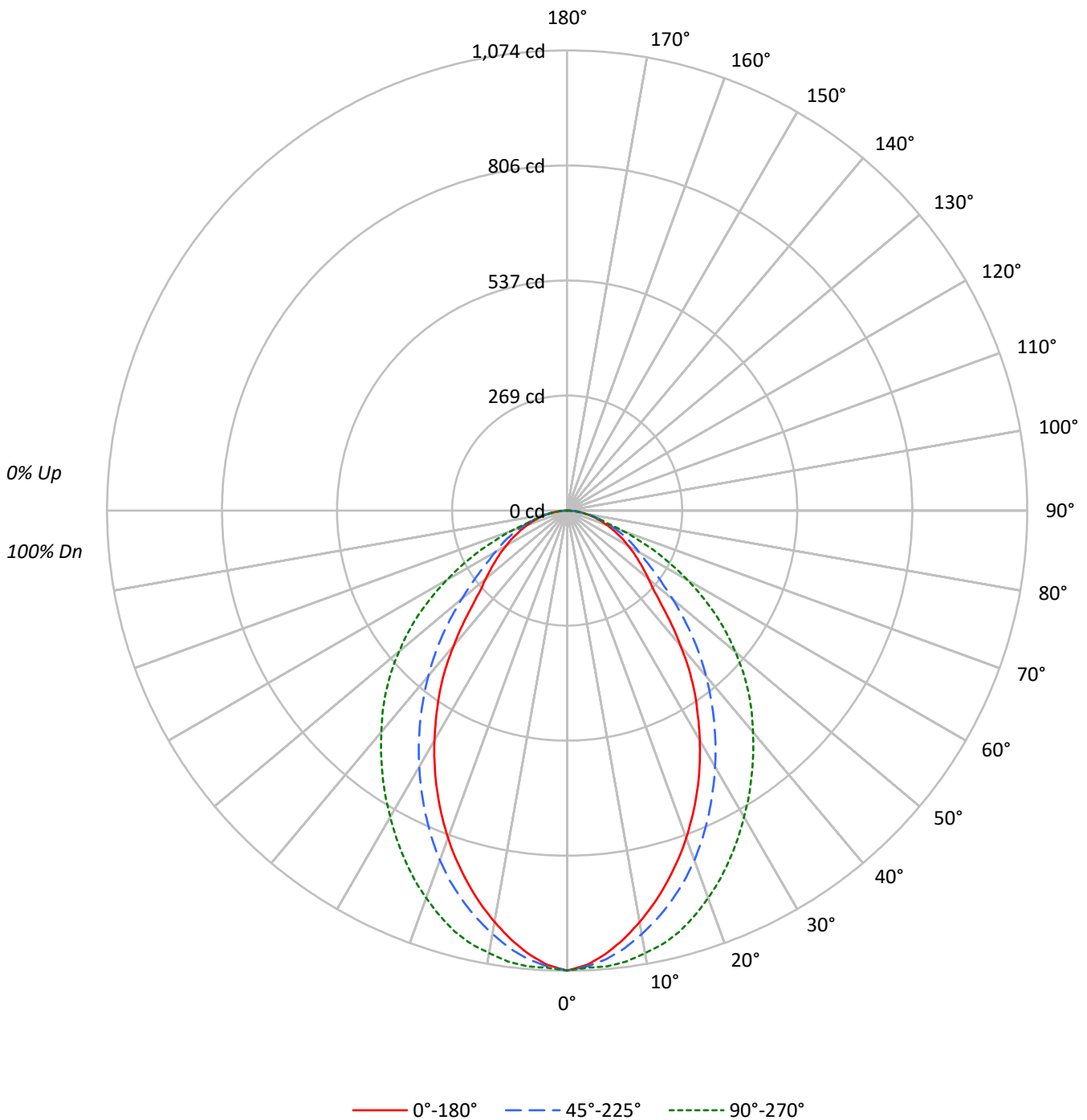
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1970.0 lumens  
Efficiency: N/A  
Efficacy: 76.4 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): 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

TEST NUMBER: P1060569

CATALOG NUMBER: S124RDRP-S795D840-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1060569

CATALOG NUMBER: S124RDRP-S795D840-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	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°	9245	9245	9245
5°	8976	9083	9231
10°	8524	8773	9172
15°	8013	8402	9063
20°	7453	7958	8819
25°	6833	7429	8530
30°	6160	6868	8209
35°	5453	6282	7900
40°	4635	5671	7583
45°	3795	5010	7289
50°	3322	4302	6860
55°	3052	3708	6348
60°	2831	3338	5596
65°	2653	3136	4684
70°	2488	2870	3517
75°	2339	2625	2562
80°	2167	2405	2167
85°	1976	2351	1877

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7289 cd/sqm



TEST NUMBER: P1060569

CATALOG NUMBER: S124RDRP-S795D840-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.2	5.0
10°-20°	267.0	13.6
20°-30°	364.9	18.5
30°-40°	383.5	19.5
40°-50°	332.8	16.9
50°-60°	251.0	12.7
60°-70°	162.7	8.3
70°-80°	83.5	4.2
80°-90°	25.3	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°	731.1	37.1
0°-40°	1114.6	56.6
0°-60°	1698.4	86.2
0°-90°	1970.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1970.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1074	1074	1074	1074	1074	
5°	1038	1053	1051	1059	1068	97
15°	899	921	942	985	1017	252
25°	719	745	782	842	898	330
35°	519	547	598	677	752	323
45°	312	341	411	514	598	245
55°	203	209	247	351	423	183
65°	130	133	154	186	230	130
75°	70	79	79	80	77	75
85°	20	25	24	23	19	23
90°	0	0	0	0	0	



TEST NUMBER: P1060569

CATALOG NUMBER: S124RDRP-S795D840-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1073.6	1073.6	1073.6	1073.6	1073.6
2.5°	1061.2	1074.5	1065.0	1066.9	1067.9
5°	1038.4	1052.7	1050.8	1059.3	1067.9
7.5°	1009.0	1026.1	1029.9	1047.0	1061.2
10°	974.8	993.8	1003.3	1030.8	1048.9
12.5°	938.7	957.7	974.8	1009.9	1035.6
15°	898.8	920.6	942.5	985.2	1016.6
17.5°	857.0	879.8	907.3	953.9	990.9
20°	813.3	836.1	868.4	918.7	962.4
22.5°	766.7	792.4	826.6	880.7	932.0
25°	719.2	744.9	781.9	841.8	897.8
27.5°	669.8	696.4	736.3	802.8	862.7
30°	619.5	648.0	690.7	761.0	825.6
32.5°	568.1	598.5	644.2	719.2	789.5
35°	518.7	547.2	597.6	677.4	751.5
37.5°	467.4	495.9	550.1	636.6	713.5
40°	412.3	443.7	504.5	593.8	674.6
42.5°	361.0	392.4	457.9	552.9	637.5
45°	311.6	341.1	411.4	514.0	598.5
47.5°	273.6	294.5	364.8	476.0	556.7
50°	248.0	257.5	321.1	434.2	512.1
52.5°	225.2	232.8	281.2	392.4	468.4
55°	203.3	209.0	247.0	350.6	422.8
57.5°	184.3	187.2	216.6	308.8	373.4
60°	164.4	168.2	193.8	266.0	324.9
62.5°	148.2	150.1	173.9	225.2	276.5
65°	130.2	133.0	153.9	186.2	229.9
67.5°	114.0	118.8	133.0	152.0	181.5
70°	98.8	105.5	114.0	123.5	139.7
72.5°	84.6	92.2	96.9	100.7	97.9
75°	70.3	78.9	78.9	79.8	77.0
77.5°	57.0	64.6	63.7	62.7	58.9
80°	43.7	50.4	48.5	47.5	43.7
82.5°	32.3	37.1	35.2	34.2	29.5
85°	20.0	24.7	23.8	22.8	19.0
87.5°	9.5	14.3	13.3	12.4	8.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060569  
 CATALOG NUMBER: S124RDRP-S795D840-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	14.23	15.72	14.60	16.03	16.35	17.97	19.46	18.33	19.77	20.08
	3H	15.90	17.23	16.28	17.56	17.92	19.09	20.43	19.47	20.75	21.12
	4H	16.57	17.81	16.97	18.16	18.54	19.39	20.64	19.79	20.99	21.37
	6H	17.07	18.23	17.49	18.59	18.99	19.59	20.74	20.00	21.11	21.50
	8H	17.25	18.35	17.67	18.73	19.14	19.65	20.74	20.07	21.13	21.53
	12H	17.37	18.42	17.80	18.80	19.23	19.68	20.73	20.11	21.11	21.54
4H	2H	15.02	16.27	15.42	16.62	17.00	18.13	19.38	18.53	19.73	20.11
	3H	16.89	17.93	17.31	18.33	18.73	19.46	20.50	19.88	20.90	21.30
	4H	17.70	18.63	18.13	19.05	19.49	19.88	20.81	20.31	21.23	21.67
	6H	18.34	19.15	18.80	19.60	20.06	20.20	21.01	20.66	21.46	21.92
	8H	18.57	19.32	19.03	19.77	20.24	20.30	21.05	20.76	21.50	21.97
	12H	18.73	19.41	19.21	19.89	20.36	20.37	21.04	20.85	21.52	22.00
8H	4H	18.05	18.80	18.51	19.25	19.72	20.01	20.77	20.48	21.22	21.68
	6H	18.84	19.46	19.33	19.95	20.43	20.43	21.06	20.93	21.55	22.03
	8H	19.16	19.72	19.67	20.23	20.72	20.59	21.15	21.11	21.66	22.15
	12H	19.42	19.92	19.93	20.41	20.97	20.73	21.23	21.24	21.72	22.28
12H	4H	18.08	18.75	18.56	19.23	19.70	20.02	20.69	20.50	21.17	21.65
	6H	18.90	19.46	19.41	19.97	20.46	20.46	21.02	20.97	21.53	22.02
	8H	19.29	19.78	19.80	20.27	20.84	20.66	21.16	21.17	21.65	22.22