

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: P1060550

Luminaire Tested: S124RDRP-S795D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060550
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-S795D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

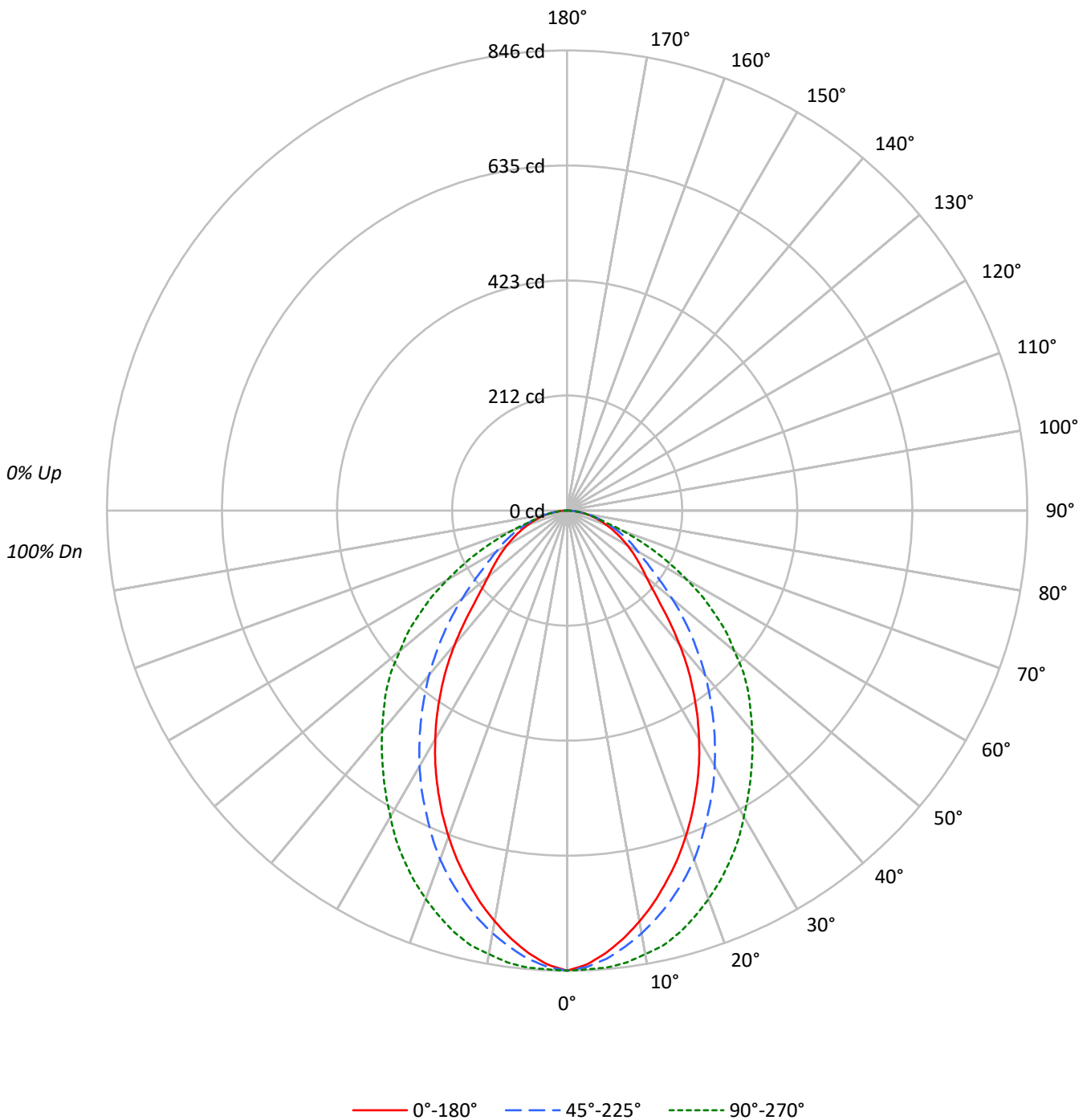
Lumens per Lamp: N/A
Luminaire Lumens: 1540.0 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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: P1060550

CATALOG NUMBER: S124RDRP-S795D830-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1060550

CATALOG NUMBER: S124RDRP-S795D830-X4F0-XX-UDD-WVL-S

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																												
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°	7283	7283	7283
5°	7059	7150	7289
10°	6706	6900	7241
15°	6292	6600	7153
20°	5842	6256	6963
25°	5349	5829	6739
30°	4822	5395	6462
35°	4250	4921	6198
40°	3617	4436	5950
45°	2937	3919	5733
50°	2541	3373	5369
55°	2356	2861	4978
60°	2199	2580	4368
65°	2060	2421	3631
70°	1921	2233	2747
75°	1830	2066	1976
80°	1716	1889	1671
85°	1581	1749	1314

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5733 cd/sqm

TEST NUMBER: P1060550

CATALOG NUMBER: S124RDRP-S795D830-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	5.1
10°-20°	209.9	13.6
20°-30°	286.6	18.6
30°-40°	300.3	19.5
40°-50°	259.9	16.9
50°-60°	195.3	12.7
60°-70°	125.9	8.2
70°-80°	64.6	4.2
80°-90°	19.3	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°	574.6	37.3
0°-40°	874.9	56.8
0°-60°	1330.1	86.4
0°-90°	1540.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1540.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	846	846	846	846	846	
5°	817	829	827	833	843	76
15°	706	724	740	774	802	198
25°	563	584	614	661	709	258
35°	404	427	468	530	590	252
45°	241	266	322	401	471	190
55°	157	162	191	272	332	141
65°	101	103	119	144	178	100
75°	55	61	62	61	59	58
85°	16	19	18	17	13	18
90°	0	0	0	0	0	



TEST NUMBER: P1060550

CATALOG NUMBER: S124RDRP-S795D830-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	845.8	845.8	845.8	845.8	845.8
2.5°	835.2	845.8	839.6	841.4	844.1
5°	816.6	829.0	827.2	833.4	843.2
7.5°	793.5	806.8	809.5	823.7	837.9
10°	766.9	782.0	789.1	810.4	828.1
12.5°	737.7	753.6	766.0	792.6	818.4
15°	705.8	723.5	740.3	774.0	802.4
17.5°	673.0	690.7	712.9	750.1	782.0
20°	637.5	657.0	682.7	721.7	759.8
22.5°	601.1	621.5	649.0	691.6	735.9
25°	563.0	584.3	613.5	661.4	709.3
27.5°	524.9	546.2	579.0	629.5	681.8
30°	485.0	507.2	542.6	597.6	649.9
32.5°	445.1	469.0	505.4	563.9	619.8
35°	404.3	427.4	468.1	530.2	589.6
37.5°	363.5	387.5	430.9	497.4	559.5
40°	321.8	346.7	394.6	464.6	529.3
42.5°	280.2	306.8	357.3	430.9	499.2
45°	241.2	266.0	321.8	400.8	470.8
47.5°	211.9	228.8	286.4	371.5	438.9
50°	189.7	198.6	251.8	339.6	400.8
52.5°	172.9	179.1	219.9	305.0	369.7
55°	156.9	162.3	190.6	272.2	331.6
57.5°	142.7	145.4	168.5	240.3	295.2
60°	127.7	130.3	149.8	205.7	253.6
62.5°	114.4	116.1	134.8	172.9	215.5
65°	101.1	102.8	118.8	143.6	178.2
67.5°	88.7	91.3	103.7	117.0	141.9
70°	76.3	81.6	88.7	94.9	109.1
72.5°	65.6	70.9	74.5	76.3	77.1
75°	55.0	61.2	62.1	61.2	59.4
77.5°	44.3	49.7	49.7	47.9	46.1
80°	34.6	39.0	38.1	36.4	33.7
82.5°	25.7	28.4	27.5	25.7	23.1
85°	16.0	18.6	17.7	16.8	13.3
87.5°	8.0	10.6	9.8	8.9	5.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060550
 CATALOG NUMBER: S124RDRP-S795D830-X4F0-XX-UDD-WVL-S

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	13.33	14.81	13.70	15.13	15.44	17.11	18.59	17.47	18.90	19.22
	3H	14.99	16.32	15.36	16.64	17.01	18.22	19.55	18.60	19.88	20.24
	4H	15.66	16.90	16.06	17.25	17.63	18.51	19.75	18.91	20.10	20.48
	6H	16.17	17.32	16.58	17.69	18.08	18.71	19.86	19.12	20.22	20.62
	8H	16.35	17.45	16.78	17.84	18.24	18.76	19.85	19.19	20.24	20.65
	12H	16.48	17.52	16.91	17.91	18.34	18.79	19.83	19.22	20.22	20.65
4H	2H	14.11	15.36	14.51	15.71	16.09	17.26	18.51	17.66	18.86	19.24
	3H	15.98	17.01	16.39	17.41	17.81	18.58	19.61	18.99	20.01	20.41
	4H	16.79	17.71	17.22	18.13	18.57	18.98	19.91	19.42	20.33	20.77
	6H	17.43	18.24	17.89	18.68	19.14	19.30	20.11	19.76	20.55	21.01
	8H	17.66	18.42	18.13	18.86	19.33	19.39	20.15	19.86	20.59	21.06
	12H	17.83	18.50	18.31	18.98	19.46	19.45	20.13	19.94	20.61	21.08
8H	4H	17.13	17.89	17.60	18.33	18.80	19.12	19.87	19.58	20.32	20.78
	6H	17.93	18.55	18.43	19.04	19.52	19.53	20.15	20.03	20.64	21.12
	8H	18.25	18.81	18.76	19.32	19.81	19.68	20.24	20.20	20.75	21.24
	12H	18.51	19.01	19.02	19.50	20.07	19.80	20.30	20.31	20.79	21.36
12H	4H	17.16	17.84	17.65	18.32	18.79	19.12	19.79	19.60	20.27	20.75
	6H	17.99	18.55	18.50	19.06	19.55	19.55	20.11	20.07	20.62	21.11
	8H	18.38	18.87	18.89	19.36	19.93	19.75	20.25	20.26	20.74	21.31