

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061024

Luminaire Tested: S124RDR-H795D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061024
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H795D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

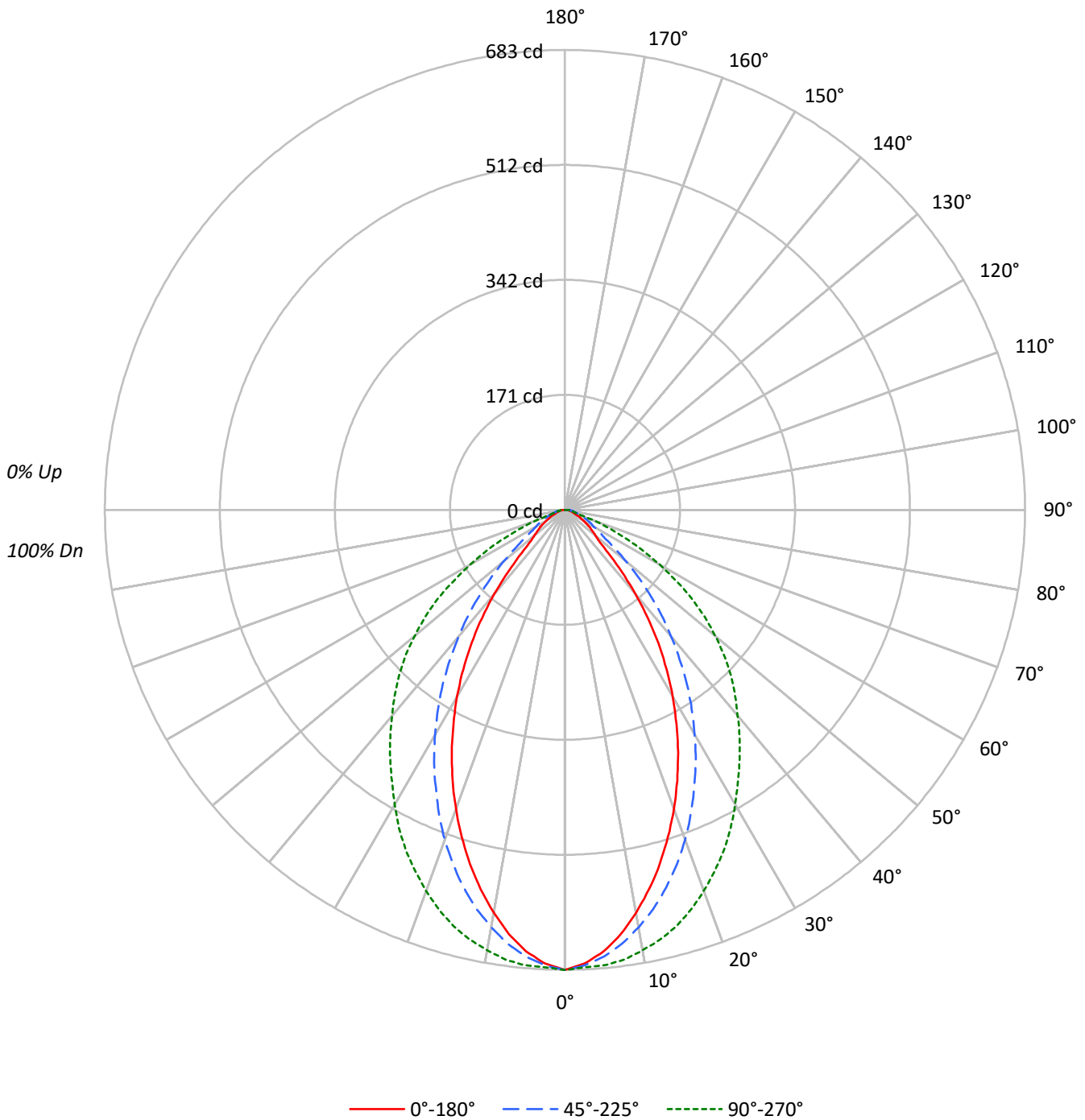
Lumens per Lamp: N/A
Luminaire Lumens: 960.8 lumens
Efficiency: N/A
Efficacy: 40.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): 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: P1061024

CATALOG NUMBER: S124RDR-H795D950-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061024

CATALOG NUMBER: S124RDR-H795D950-X4F0-XX-UDD-SVL-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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5884	5884	5884
5°	5689	5756	5868
10°	5313	5503	5808
15°	4851	5177	5704
20°	4334	4780	5520
25°	3775	4312	5303
30°	3181	3829	5022
35°	2541	3318	4752
40°	1828	2755	4485
45°	1101	2170	4245
50°	792	1573	3901
55°	665	1057	3459
60°	539	839	2785
65°	426	762	2001
70°	373	634	1073
75°	346	579	519
80°	347	605	476
85°	514	860	603

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4245 cd/sqm



TEST NUMBER: P1061024

CATALOG NUMBER: S124RDR-H795D950-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.7	6.5
10°-20°	164.3	17.1
20°-30°	213.3	22.2
30°-40°	205.0	21.3
40°-50°	152.1	15.8
50°-60°	93.2	9.7
60°-70°	45.2	4.7
70°-80°	17.2	1.8
80°-90°	7.8	0.8
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°	440.3	45.8
0°-40°	645.3	67.2
0°-60°	890.5	92.7
0°-90°	960.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	960.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	683	683	683	683	683	
5°	658	668	666	672	679	61
15°	544	560	581	616	640	152
25°	397	417	454	512	558	182
35°	242	263	316	390	452	150
45°	90	113	178	272	349	75
55°	44	46	70	159	230	40
65°	21	23	37	59	98	22
75°	10	16	17	16	16	11
85°	5	9	9	8	6	5
90°	0	0	0	0	0	

TEST NUMBER: P1061024

CATALOG NUMBER: S124RDR-H795D950-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	683.3	683.3	683.3	683.3	683.3
2.5°	674.6	682.4	677.2	678.9	679.8
5°	658.1	667.6	665.9	672.0	678.9
7.5°	635.5	646.8	650.2	662.4	673.7
10°	607.6	621.6	629.4	649.4	664.2
12.5°	577.2	592.0	606.8	633.7	653.7
15°	544.2	559.8	580.7	615.5	639.8
17.5°	509.4	526.8	552.0	593.7	622.4
20°	472.9	491.2	521.6	567.7	602.4
22.5°	435.5	454.6	488.6	539.8	580.7
25°	397.3	417.3	453.8	512.0	558.1
27.5°	358.2	379.0	420.7	482.5	532.9
30°	319.9	339.9	385.1	452.0	505.1
32.5°	280.8	301.6	350.3	420.7	478.1
35°	241.7	263.4	315.6	390.3	452.0
37.5°	201.7	225.2	279.9	360.8	426.0
40°	162.6	185.2	245.1	330.3	399.0
42.5°	124.3	148.7	212.1	299.9	373.8
45°	90.4	113.0	178.2	272.1	348.6
47.5°	67.8	81.7	146.9	246.0	320.8
50°	59.1	61.7	117.4	217.3	291.2
52.5°	51.3	53.0	91.3	186.0	261.7
55°	44.3	46.1	70.4	159.1	230.4
57.5°	37.4	39.1	56.5	133.0	194.7
60°	31.3	33.0	48.7	106.1	161.7
62.5°	26.1	26.9	43.5	80.8	129.5
65°	20.9	22.6	37.4	59.1	98.2
67.5°	17.4	19.1	30.4	40.9	68.7
70°	14.8	19.1	25.2	28.7	42.6
72.5°	12.2	17.4	20.9	20.0	20.0
75°	10.4	16.5	17.4	15.6	15.6
77.5°	8.7	14.8	13.9	13.0	12.2
80°	7.0	12.2	12.2	10.4	9.6
82.5°	6.1	9.6	9.6	9.6	7.8
85°	5.2	8.7	8.7	7.8	6.1
87.5°	3.5	7.0	7.8	7.0	4.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061024
 CATALOG NUMBER: S124RDR-H795D950-X4F0-XX-UDD-SVL-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	5.97	7.31	6.33	7.62	7.93	15.07	16.41	15.43	16.72	17.04
	3H	7.01	8.20	7.39	8.53	8.89	15.57	16.76	15.95	17.09	17.45
	4H	7.53	8.63	7.93	8.98	9.37	15.59	16.69	15.99	17.04	17.43
	6H	7.98	9.00	8.40	9.37	9.76	15.58	16.60	16.00	16.97	17.37
	8H	8.17	9.14	8.60	9.53	9.93	15.58	16.54	16.01	16.94	17.34
	12H	8.39	9.31	8.82	9.69	10.12	15.58	16.50	16.01	16.88	17.31
4H	2H	7.06	8.17	7.47	8.52	8.90	14.96	16.07	15.36	16.42	16.80
	3H	8.33	9.24	8.75	9.64	10.05	15.54	16.44	15.95	16.85	17.25
	4H	9.04	9.85	9.47	10.27	10.71	15.58	16.39	16.02	16.81	17.26
	6H	9.67	10.37	10.14	10.82	11.28	15.64	16.34	16.10	16.78	17.25
	8H	9.92	10.57	10.39	11.02	11.49	15.65	16.31	16.12	16.75	17.22
	12H	10.20	10.77	10.68	11.26	11.73	15.69	16.26	16.17	16.75	17.22
8H	4H	9.47	10.12	9.94	10.57	11.04	15.53	16.19	16.00	16.63	17.10
	6H	10.35	10.88	10.85	11.38	11.86	15.63	16.16	16.13	16.66	17.14
	8H	10.76	11.24	11.28	11.75	12.24	15.69	16.17	16.21	16.68	17.18
	12H	11.23	11.66	11.75	12.16	12.73	15.79	16.21	16.30	16.71	17.28
12H	4H	9.51	10.09	10.00	10.57	11.04	15.51	16.08	15.99	16.57	17.04
	6H	10.46	10.94	10.98	11.46	11.95	15.61	16.09	16.13	16.60	17.09
	8H	10.98	11.41	11.50	11.90	12.47	15.71	16.14	16.23	16.63	17.20