

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: P1060442

Luminaire Tested: S124RDRP-S350D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060442
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-S350D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

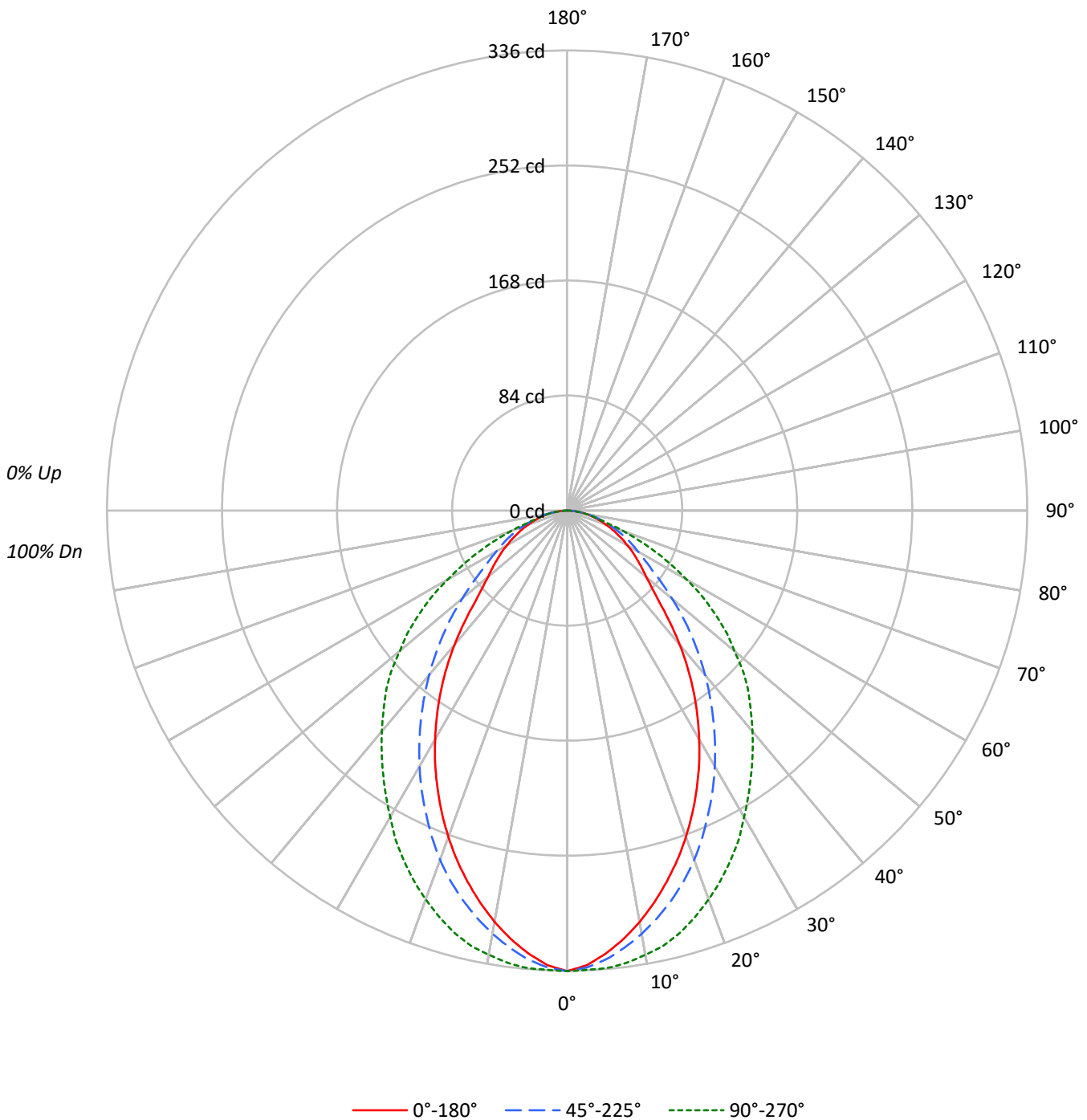
Lumens per Lamp: N/A
Luminaire Lumens: 612.3 lumens
Efficiency: N/A
Efficacy: 49.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1060442

CATALOG NUMBER: S124RDRP-S350D935-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1060442

CATALOG NUMBER: S124RDRP-S350D935-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	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°	2896	2896	2896
5°	2807	2843	2898
10°	2666	2743	2879
15°	2502	2625	2844
20°	2323	2487	2768
25°	2127	2317	2679
30°	1917	2145	2569
35°	1690	1956	2464
40°	1439	1764	2366
45°	1168	1559	2280
50°	1010	1341	2134
55°	937	1138	1979
60°	875	1026	1736
65°	819	962	1445
70°	763	889	1093
75°	729	822	785
80°	679	754	664
85°	622	701	524

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2280 cd/sqm



TEST NUMBER: P1060442

CATALOG NUMBER: S124RDRP-S350D935-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.1	5.1
10°-20°	83.5	13.6
20°-30°	114.0	18.6
30°-40°	119.4	19.5
40°-50°	103.3	16.9
50°-60°	77.6	12.7
60°-70°	50.1	8.2
70°-80°	25.7	4.2
80°-90°	7.7	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°	228.5	37.3
0°-40°	347.9	56.8
0°-60°	528.9	86.4
0°-90°	612.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	612.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	336	336	336	336	336	
5°	325	330	329	331	335	30
15°	281	288	294	308	319	79
25°	224	232	244	263	282	103
35°	161	170	186	211	234	100
45°	96	106	128	159	187	76
55°	62	64	76	108	132	56
65°	40	41	47	57	71	40
75°	22	24	25	24	24	23
85°	6	7	7	7	5	7
90°	0	0	0	0	0	



TEST NUMBER: P1060442

CATALOG NUMBER: S124RDRP-S350D935-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	336.3	336.3	336.3	336.3	336.3
2.5°	332.1	336.3	333.8	334.5	335.6
5°	324.7	329.6	328.9	331.4	335.3
7.5°	315.5	320.8	321.9	327.5	333.1
10°	304.9	310.9	313.7	322.2	329.3
12.5°	293.3	299.6	304.6	315.2	325.4
15°	280.6	287.7	294.4	307.8	319.0
17.5°	267.6	274.6	283.4	298.2	310.9
20°	253.5	261.2	271.4	287.0	302.1
22.5°	239.0	247.1	258.0	275.0	292.6
25°	223.9	232.3	243.9	263.0	282.0
27.5°	208.7	217.2	230.2	250.3	271.1
30°	192.8	201.6	215.7	237.6	258.4
32.5°	177.0	186.5	200.9	224.2	246.4
35°	160.8	169.9	186.1	210.8	234.4
37.5°	144.5	154.1	171.3	197.8	222.4
40°	128.0	137.8	156.9	184.7	210.5
42.5°	111.4	122.0	142.1	171.3	198.5
45°	95.9	105.8	128.0	159.3	187.2
47.5°	84.3	91.0	113.9	147.7	174.5
50°	75.4	79.0	100.1	135.0	159.3
52.5°	68.7	71.2	87.4	121.3	147.0
55°	62.4	64.5	75.8	108.2	131.8
57.5°	56.8	57.8	67.0	95.5	117.4
60°	50.8	51.8	59.6	81.8	100.8
62.5°	45.5	46.2	53.6	68.7	85.7
65°	40.2	40.9	47.2	57.1	70.9
67.5°	35.3	36.3	41.2	46.5	56.4
70°	30.3	32.4	35.3	37.7	43.4
72.5°	26.1	28.2	29.6	30.3	30.7
75°	21.9	24.3	24.7	24.3	23.6
77.5°	17.6	19.7	19.7	19.0	18.3
80°	13.7	15.5	15.2	14.5	13.4
82.5°	10.2	11.3	10.9	10.2	9.2
85°	6.3	7.4	7.1	6.7	5.3
87.5°	3.2	4.2	3.9	3.5	2.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060442
 CATALOG NUMBER: S124RDRP-S350D935-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	10.13	11.61	10.49	11.92	12.24	13.90	15.38	14.26	15.70	16.01
	3H	11.78	13.11	12.16	13.44	13.80	15.01	16.34	15.39	16.67	17.03
	4H	12.45	13.70	12.85	14.05	14.43	15.30	16.55	15.70	16.90	17.28
	6H	12.96	14.11	13.38	14.48	14.87	15.50	16.65	15.91	17.02	17.41
	8H	13.14	14.24	13.57	14.63	15.03	15.55	16.65	15.98	17.04	17.44
	12H	13.27	14.32	13.70	14.70	15.13	15.58	16.63	16.01	17.01	17.44
4H	2H	10.91	12.15	11.31	12.50	12.88	14.06	15.30	14.46	15.65	16.03
	3H	12.77	13.80	13.18	14.20	14.60	15.37	16.40	15.78	16.80	17.20
	4H	13.58	14.51	14.01	14.92	15.36	15.78	16.71	16.21	17.12	17.56
	6H	14.22	15.03	14.68	15.47	15.93	16.09	16.90	16.55	17.34	17.80
	8H	14.45	15.21	14.92	15.65	16.12	16.19	16.94	16.65	17.38	17.85
	12H	14.62	15.29	15.10	15.77	16.25	16.25	16.92	16.73	17.40	17.87
8H	4H	13.93	14.68	14.39	15.13	15.59	15.91	16.66	16.37	17.11	17.58
	6H	14.72	15.34	15.22	15.83	16.31	16.32	16.95	16.82	17.44	17.92
	8H	15.04	15.60	15.56	16.11	16.60	16.47	17.03	16.99	17.54	18.03
	12H	15.30	15.80	15.81	16.29	16.86	16.60	17.09	17.11	17.58	18.15
12H	4H	13.96	14.63	14.44	15.11	15.58	15.91	16.59	16.40	17.07	17.54
	6H	14.78	15.34	15.30	15.85	16.34	16.34	16.90	16.86	17.41	17.90
	8H	15.17	15.66	15.68	16.16	16.72	16.55	17.04	17.06	17.53	18.10