

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: P1060866

Luminaire Tested: S124RDRP-H350D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060866
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-H350D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

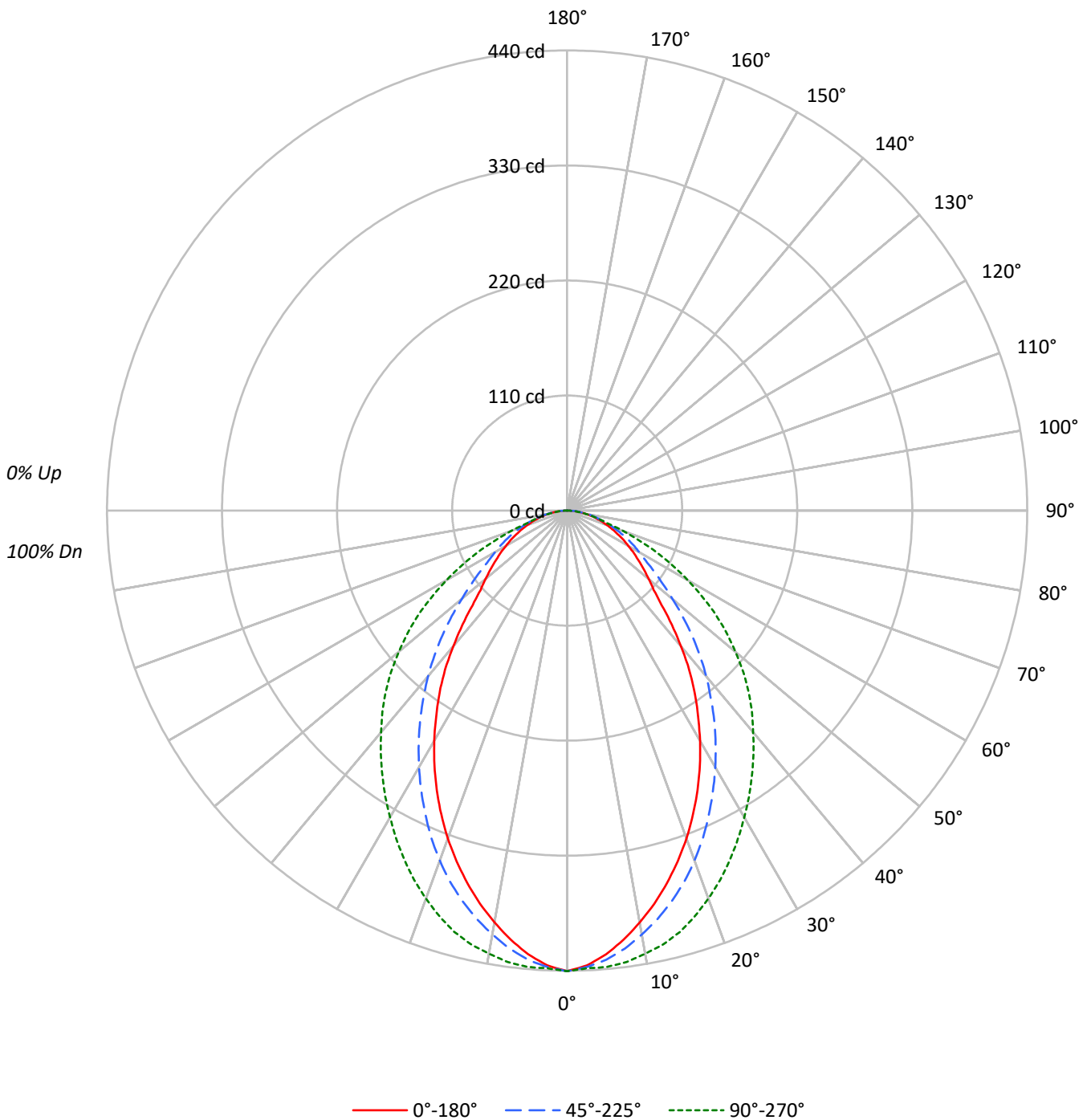
Lumens per Lamp: N/A
Luminaire Lumens: 808.0 lumens
Efficiency: N/A
Efficacy: 69.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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: P1060866

CATALOG NUMBER: S124RDRP-H350D950-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1060866

CATALOG NUMBER: S124RDRP-H350D950-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	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	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3792	3792	3792
5°	3681	3726	3786
10°	3496	3598	3762
15°	3287	3447	3718
20°	3057	3264	3618
25°	2803	3047	3499
30°	2527	2817	3367
35°	2237	2577	3240
40°	1901	2326	3110
45°	1556	2054	2990
50°	1362	1764	2813
55°	1252	1521	2603
60°	1161	1369	2296
65°	1088	1286	1921
70°	1020	1178	1443
75°	958	1075	1051
80°	888	987	888
85°	810	958	771

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2990 cd/sqm



TEST NUMBER: P1060866

CATALOG NUMBER: S124RDRP-H350D950-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.7	5.0
10°-20°	109.5	13.6
20°-30°	149.7	18.5
30°-40°	157.3	19.5
40°-50°	136.5	16.9
50°-60°	103.0	12.7
60°-70°	66.8	8.3
70°-80°	34.3	4.2
80°-90°	10.4	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°	299.9	37.1
0°-40°	457.2	56.6
0°-60°	696.6	86.2
0°-90°	808.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	808.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	440	440	440	440	440	
5°	426	432	431	434	438	40
15°	369	378	387	404	417	103
25°	295	306	321	345	368	135
35°	213	224	245	278	308	132
45°	128	140	169	211	246	101
55°	83	86	101	144	173	75
65°	53	55	63	76	94	53
75°	29	32	32	33	32	31
85°	8	10	10	9	8	9
90°	0	0	0	0	0	



TEST NUMBER: P1060866

CATALOG NUMBER: S124RDRP-H350D950-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	440.4	440.4	440.4	440.4	440.4
2.5°	435.3	440.7	436.8	437.6	438.0
5°	425.9	431.8	431.0	434.5	438.0
7.5°	413.9	420.9	422.4	429.4	435.3
10°	399.8	407.6	411.5	422.8	430.2
12.5°	385.0	392.8	399.8	414.2	424.8
15°	368.7	377.6	386.6	404.1	417.0
17.5°	351.5	360.9	372.2	391.3	406.5
20°	333.6	342.9	356.2	376.8	394.8
22.5°	314.5	325.0	339.0	361.2	382.3
25°	295.0	305.5	320.7	345.3	368.3
27.5°	274.7	285.6	302.0	329.3	353.8
30°	254.1	265.8	283.3	312.1	338.6
32.5°	233.0	245.5	264.2	295.0	323.8
35°	212.8	224.5	245.1	277.9	308.2
37.5°	191.7	203.4	225.6	261.1	292.7
40°	169.1	182.0	206.9	243.6	276.7
42.5°	148.1	160.9	187.8	226.8	261.5
45°	127.8	139.9	168.7	210.8	245.5
47.5°	112.2	120.8	149.6	195.2	228.4
50°	101.7	105.6	131.7	178.1	210.0
52.5°	92.4	95.5	115.4	160.9	192.1
55°	83.4	85.7	101.3	143.8	173.4
57.5°	75.6	76.8	88.9	126.7	153.2
60°	67.4	69.0	79.5	109.1	133.3
62.5°	60.8	61.6	71.3	92.4	113.4
65°	53.4	54.6	63.1	76.4	94.3
67.5°	46.8	48.7	54.6	62.4	74.4
70°	40.5	43.3	46.8	50.7	57.3
72.5°	34.7	37.8	39.7	41.3	40.1
75°	28.8	32.3	32.3	32.7	31.6
77.5°	23.4	26.5	26.1	25.7	24.2
80°	17.9	20.7	19.9	19.5	17.9
82.5°	13.2	15.2	14.4	14.0	12.1
85°	8.2	10.1	9.7	9.4	7.8
87.5°	3.9	5.8	5.5	5.1	3.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060866
 CATALOG NUMBER: S124RDRP-H350D950-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	11.14	12.62	11.50	12.94	13.25	14.87	16.36	15.24	16.67	16.99
	3H	12.80	14.14	13.18	14.46	14.83	16.00	17.33	16.38	17.66	18.02
	4H	13.47	14.72	13.87	15.07	15.45	16.30	17.54	16.70	17.89	18.27
	6H	13.98	15.13	14.39	15.50	15.89	16.50	17.65	16.91	18.02	18.41
	8H	14.15	15.25	14.58	15.64	16.04	16.55	17.65	16.98	18.04	18.44
	12H	14.27	15.32	14.70	15.70	16.13	16.58	17.63	17.01	18.02	18.45
4H	2H	11.93	13.18	12.33	13.52	13.90	15.04	16.29	15.44	16.64	17.02
	3H	13.80	14.83	14.21	15.23	15.64	16.37	17.41	16.78	17.81	18.21
	4H	14.60	15.53	15.03	15.95	16.39	16.79	17.72	17.22	18.13	18.57
	6H	15.25	16.06	15.70	16.50	16.96	17.11	17.92	17.57	18.36	18.82
	8H	15.47	16.22	15.93	16.67	17.14	17.20	17.96	17.67	18.40	18.87
	12H	15.63	16.31	16.12	16.79	17.26	17.27	17.95	17.76	18.43	18.90
8H	4H	14.95	15.71	15.41	16.15	16.62	16.92	17.68	17.38	18.12	18.59
	6H	15.74	16.37	16.24	16.86	17.34	17.34	17.96	17.84	18.45	18.93
	8H	16.06	16.62	16.57	17.13	17.62	17.49	18.06	18.01	18.57	19.06
	12H	16.32	16.82	16.83	17.31	17.88	17.63	18.13	18.14	18.62	19.19
12H	4H	14.98	15.65	15.46	16.13	16.61	16.92	17.60	17.41	18.08	18.55
	6H	15.80	16.36	16.32	16.87	17.36	17.36	17.92	17.87	18.43	18.92
	8H	16.19	16.68	16.70	17.17	17.74	17.57	18.06	18.08	18.56	19.12