

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: P1060443

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060443
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-S350D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

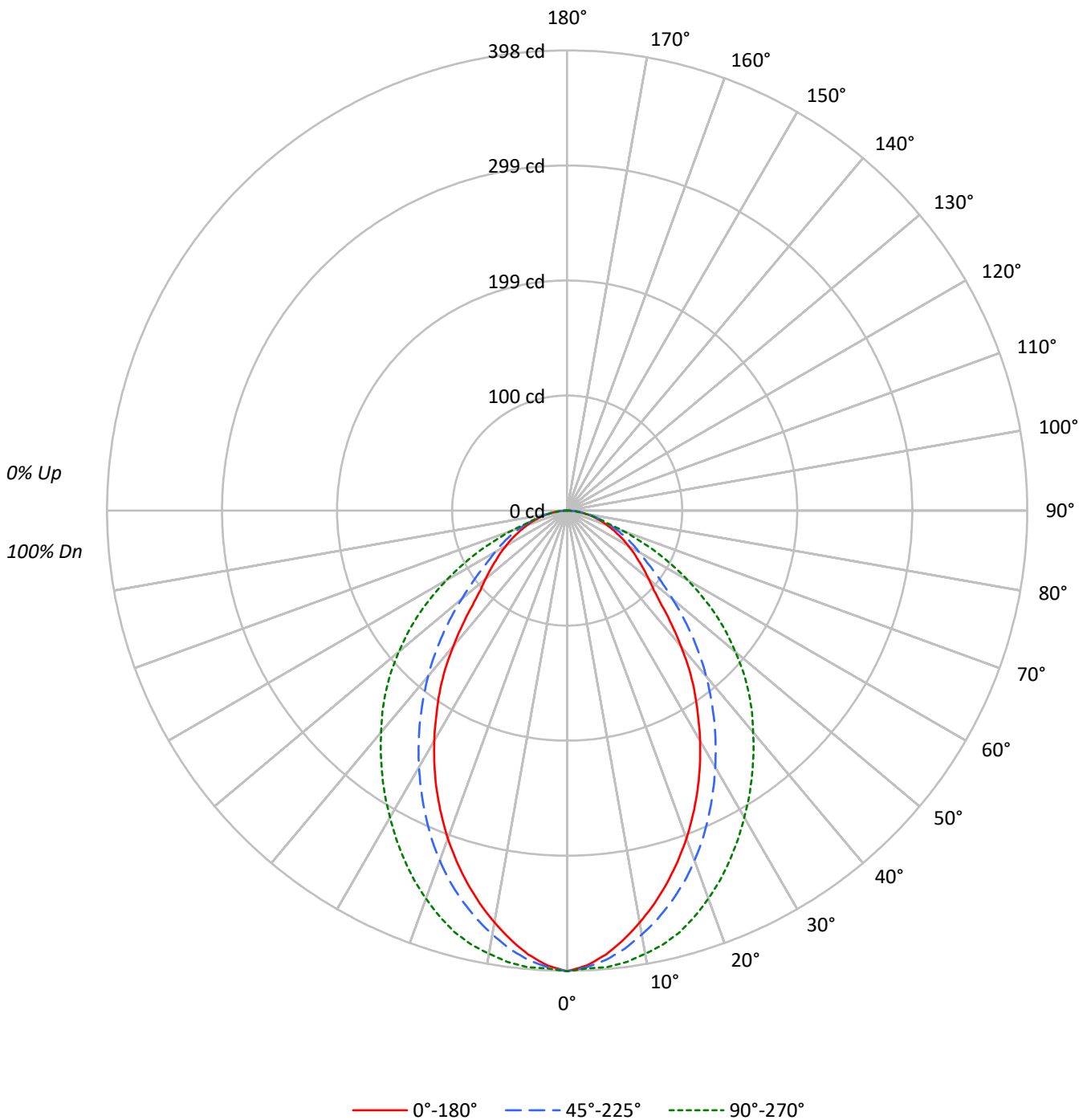
Lumens per Lamp: N/A
Luminaire Lumens: 731.1 lumens
Efficiency: N/A
Efficacy: 58.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1060443

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

Luminous Intensity Polar Plot





TEST NUMBER: P1060443

CATALOG NUMBER: S124RDRP-S350D935-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°	3431	3431	3431
5°	3331	3370	3426
10°	3163	3255	3403
15°	2973	3118	3363
20°	2766	2953	3273
25°	2536	2757	3166
30°	2286	2548	3047
35°	2024	2332	2932
40°	1720	2104	2814
45°	1408	1860	2705
50°	1232	1597	2545
55°	1132	1377	2356
60°	1051	1238	2077
65°	984	1163	1738
70°	924	1065	1304
75°	868	975	952
80°	803	893	803
85°	731	869	701

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2705 cd/sqm



TEST NUMBER: P1060443

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	5.0
10°-20°	99.1	13.6
20°-30°	135.4	18.5
30°-40°	142.3	19.5
40°-50°	123.5	16.9
50°-60°	93.2	12.7
60°-70°	60.4	8.3
70°-80°	31.0	4.2
80°-90°	9.4	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°	271.3	37.1
0°-40°	413.6	56.6
0°-60°	630.3	86.2
0°-90°	731.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	731.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	385	391	390	393	396	36
15°	334	342	350	366	377	93
25°	267	276	290	312	333	122
35°	192	203	222	251	279	120
45°	116	127	153	191	222	91
55°	75	78	92	130	157	68
65°	48	49	57	69	85	48
75°	26	29	29	30	29	28
85°	7	9	9	8	7	8
90°	0	0	0	0	0	



TEST NUMBER: P1060443

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	398.4	398.4	398.4	398.4	398.4
2.5°	393.8	398.8	395.2	395.9	396.3
5°	385.4	390.6	389.9	393.1	396.3
7.5°	374.4	380.8	382.2	388.5	393.8
10°	361.7	368.8	372.3	382.5	389.2
12.5°	348.3	355.4	361.7	374.8	384.3
15°	333.5	341.6	349.7	365.6	377.2
17.5°	318.0	326.5	336.7	354.0	367.7
20°	301.8	310.3	322.2	340.9	357.2
22.5°	284.5	294.0	306.7	326.8	345.9
25°	266.9	276.4	290.2	312.4	333.2
27.5°	248.6	258.4	273.2	297.9	320.1
30°	229.9	240.5	256.3	282.4	306.4
32.5°	210.8	222.1	239.0	266.9	293.0
35°	192.5	203.1	221.8	251.4	278.9
37.5°	173.5	184.0	204.1	236.2	264.8
40°	153.0	164.7	187.2	220.4	250.3
42.5°	134.0	145.6	169.9	205.2	236.6
45°	115.6	126.6	152.7	190.7	222.1
47.5°	101.5	109.3	135.4	176.6	206.6
50°	92.0	95.5	119.2	161.1	190.0
52.5°	83.6	86.4	104.4	145.6	173.8
55°	75.4	77.6	91.7	130.1	156.9
57.5°	68.4	69.5	80.4	114.6	138.6
60°	61.0	62.4	71.9	98.7	120.6
62.5°	55.0	55.7	64.5	83.6	102.6
65°	48.3	49.4	57.1	69.1	85.3
67.5°	42.3	44.1	49.4	56.4	67.3
70°	36.7	39.1	42.3	45.8	51.8
72.5°	31.4	34.2	36.0	37.4	36.3
75°	26.1	29.3	29.3	29.6	28.6
77.5°	21.2	24.0	23.6	23.3	21.9
80°	16.2	18.7	18.0	17.6	16.2
82.5°	12.0	13.8	13.0	12.7	10.9
85°	7.4	9.2	8.8	8.5	7.1
87.5°	3.5	5.3	4.9	4.6	3.2
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060443
 CATALOG NUMBER: S124RDRP-S350D935-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	10.79	12.28	11.15	12.59	12.90	14.52	16.01	14.89	16.32	16.64
	3H	12.46	13.79	12.83	14.12	14.48	15.65	16.98	16.03	17.31	17.67
	4H	13.12	14.37	13.52	14.72	15.10	15.95	17.19	16.35	17.54	17.92
	6H	13.63	14.78	14.04	15.15	15.54	16.15	17.30	16.56	17.67	18.06
	8H	13.81	14.90	14.23	15.29	15.69	16.20	17.30	16.63	17.69	18.09
	12H	13.93	14.98	14.36	15.36	15.79	16.23	17.28	16.66	17.67	18.10
4H	2H	11.58	12.83	11.98	13.18	13.56	14.69	15.94	15.09	16.29	16.67
	3H	13.45	14.49	13.86	14.89	15.29	16.02	17.06	16.43	17.46	17.86
	4H	14.26	15.19	14.69	15.60	16.04	16.44	17.37	16.87	17.78	18.22
	6H	14.90	15.71	15.36	16.15	16.61	16.76	17.57	17.22	18.01	18.47
	8H	15.12	15.88	15.59	16.33	16.79	16.85	17.61	17.32	18.05	18.52
	12H	15.29	15.96	15.77	16.44	16.92	16.92	17.60	17.41	18.08	18.55
8H	4H	14.60	15.36	15.07	15.81	16.27	16.57	17.33	17.03	17.77	18.24
	6H	15.39	16.02	15.89	16.51	16.99	16.99	17.61	17.49	18.11	18.58
	8H	15.71	16.28	16.23	16.79	17.27	17.15	17.71	17.66	18.22	18.71
	12H	15.98	16.47	16.49	16.97	17.53	17.29	17.78	17.80	18.27	18.84
12H	4H	14.63	15.31	15.12	15.79	16.26	16.57	17.25	17.06	17.73	18.20
	6H	15.46	16.02	15.97	16.53	17.02	17.01	17.57	17.53	18.08	18.57
	8H	15.84	16.34	16.35	16.83	17.40	17.22	17.72	17.73	18.21	18.77