

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: P1060397

Luminaire Tested: S124RDR-S350D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060397
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: S124RDR-S350D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

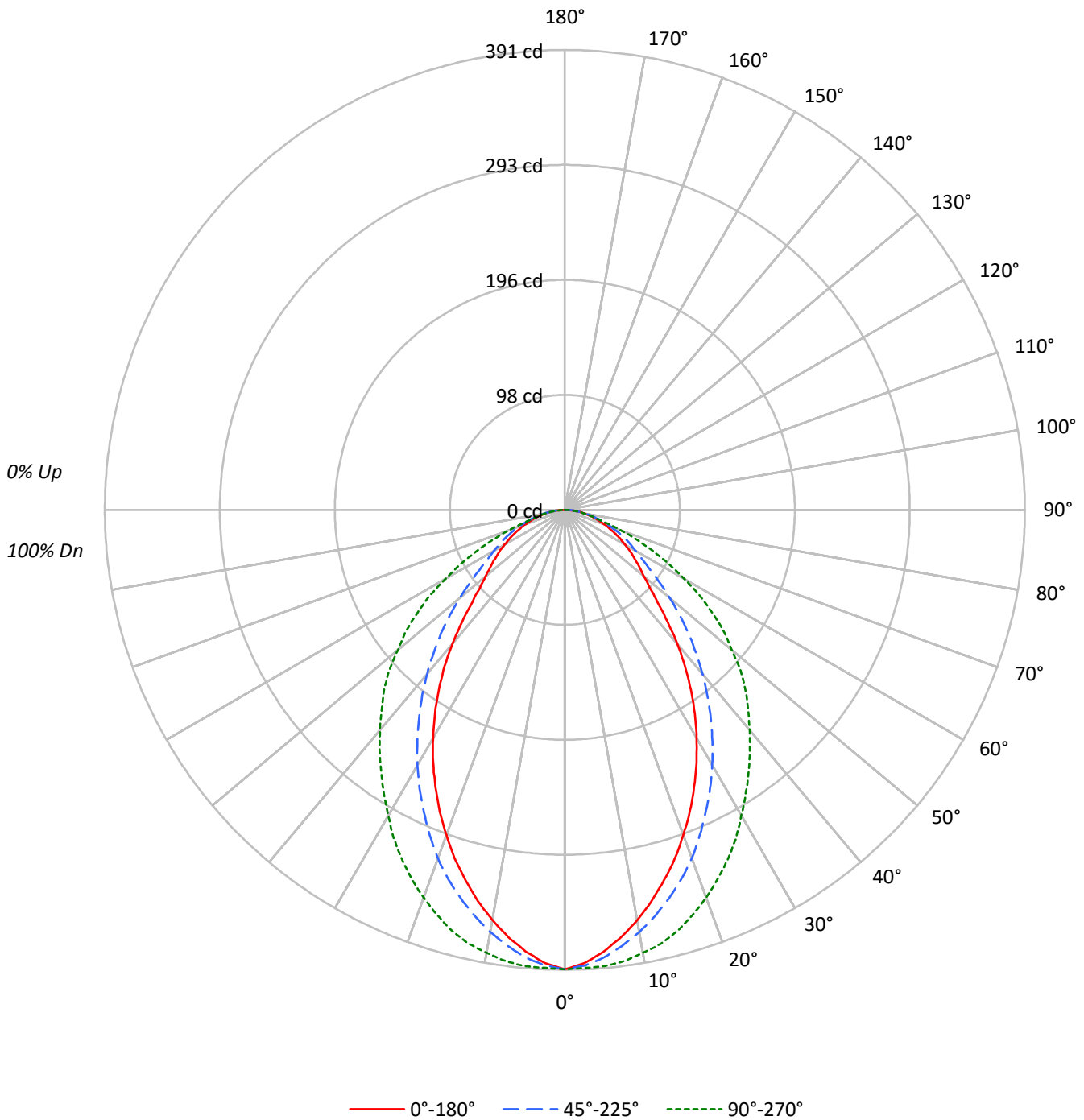
Lumens per Lamp: N/A
Luminaire Lumens: 711.1 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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: P1060397

CATALOG NUMBER: S124RDR-S350D835-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





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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				
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°	3364	3364	3364
5°	3260	3302	3366
10°	3097	3186	3344
15°	2905	3048	3303
20°	2698	2889	3216
25°	2470	2692	3113
30°	2227	2492	2984
35°	1963	2273	2862
40°	1670	2048	2747
45°	1357	1810	2647
50°	1174	1558	2480
55°	1088	1321	2298
60°	1016	1192	2017
65°	952	1119	1677
70°	886	1030	1269
75°	845	955	912
80°	793	873	774
85°	731	810	603

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2647 cd/sqm



TEST NUMBER: P1060397

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.1	5.1
10°-20°	96.9	13.6
20°-30°	132.4	18.6
30°-40°	138.7	19.5
40°-50°	120.0	16.9
50°-60°	90.2	12.7
60°-70°	58.1	8.2
70°-80°	29.8	4.2
80°-90°	8.9	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°	265.4	37.3
0°-40°	404.0	56.8
0°-60°	614.2	86.4
0°-90°	711.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	711.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	391	391	391	391	391	
5°	377	383	382	385	389	35
15°	326	334	342	357	370	91
25°	260	270	283	305	328	119
35°	187	197	216	245	272	116
45°	111	123	149	185	217	88
55°	72	75	88	126	153	65
65°	47	48	55	66	82	46
75°	25	28	29	28	27	27
85°	7	9	8	8	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	390.6	390.6	390.6	390.6	390.6
2.5°	385.7	390.6	387.7	388.6	389.8
5°	377.1	382.8	382.0	384.9	389.4
7.5°	366.4	372.6	373.8	380.4	386.9
10°	354.2	361.1	364.4	374.2	382.4
12.5°	340.7	348.0	353.8	366.0	377.9
15°	325.9	334.1	341.9	357.4	370.5
17.5°	310.8	319.0	329.2	346.4	361.1
20°	294.4	303.4	315.3	333.3	350.9
22.5°	277.6	287.0	299.7	319.4	339.8
25°	260.0	269.8	283.3	305.4	327.6
27.5°	242.4	252.2	267.4	290.7	314.9
30°	224.0	234.2	250.6	276.0	300.1
32.5°	205.5	216.6	233.4	260.4	286.2
35°	186.7	197.3	216.2	244.8	272.3
37.5°	167.9	178.9	199.0	229.7	258.4
40°	148.6	160.1	182.2	214.5	244.4
42.5°	129.4	141.7	165.0	199.0	230.5
45°	111.4	122.8	148.6	185.1	217.4
47.5°	97.9	105.6	132.2	171.6	202.7
50°	87.6	91.7	116.3	156.8	185.1
52.5°	79.8	82.7	101.5	140.8	170.7
55°	72.5	74.9	88.0	125.7	153.1
57.5°	65.9	67.1	77.8	111.0	136.3
60°	59.0	60.2	69.2	95.0	117.1
62.5°	52.8	53.6	62.2	79.8	99.5
65°	46.7	47.5	54.9	66.3	82.3
67.5°	40.9	42.2	47.9	54.0	65.5
70°	35.2	37.7	40.9	43.8	50.4
72.5°	30.3	32.8	34.4	35.2	35.6
75°	25.4	28.3	28.7	28.3	27.4
77.5°	20.5	22.9	22.9	22.1	21.3
80°	16.0	18.0	17.6	16.8	15.6
82.5°	11.9	13.1	12.7	11.9	10.6
85°	7.4	8.6	8.2	7.8	6.1
87.5°	3.7	4.9	4.5	4.1	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)