

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: P1060457

Luminaire Tested: S124RDR-S350D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060457
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-S350D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

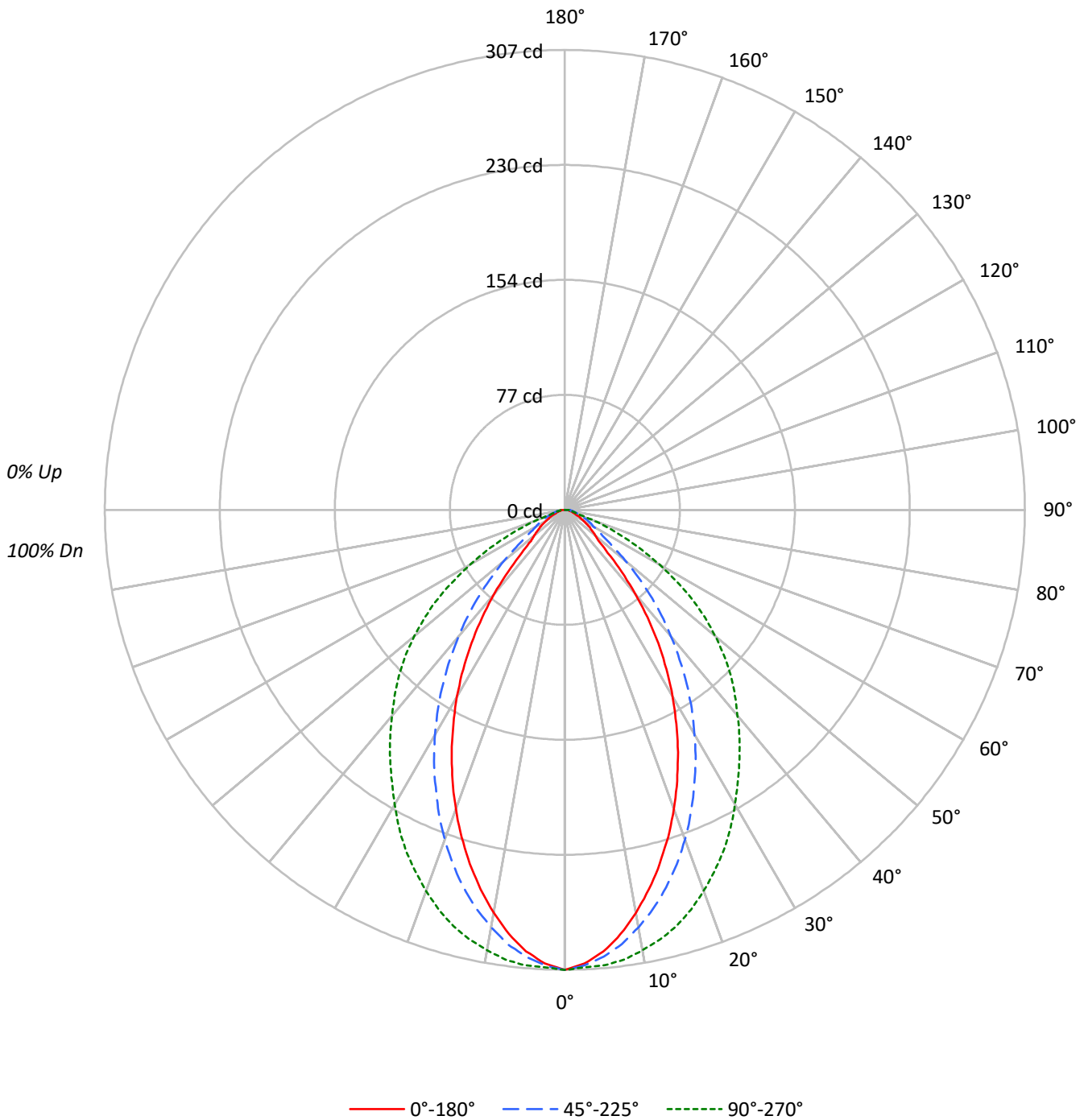
Lumens per Lamp: N/A
Luminaire Lumens: 431.8 lumens
Efficiency: N/A
Efficacy: 34.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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				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	73	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	50	45	55	49	45	54	48	45	43				43
9	65	54	47	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°	2644	2644	2644
5°	2557	2587	2638
10°	2388	2474	2610
15°	2181	2327	2564
20°	1948	2148	2482
25°	1697	1938	2384
30°	1430	1721	2257
35°	1142	1491	2136
40°	822	1239	2016
45°	494	975	1908
50°	356	706	1754
55°	299	474	1554
60°	243	377	1252
65°	192	342	901
70°	166	285	481
75°	156	260	233
80°	154	273	213
85°	227	385	267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1908 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.2	6.5
10°-20°	73.9	17.1
20°-30°	95.9	22.2
30°-40°	92.1	21.3
40°-50°	68.4	15.8
50°-60°	41.9	9.7
60°-70°	20.3	4.7
70°-80°	7.7	1.8
80°-90°	3.5	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°	197.9	45.8
0°-40°	290.1	67.2
0°-60°	400.3	92.7
0°-90°	431.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	431.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	307	307	307	307	307	
5°	296	300	299	302	305	28
15°	245	252	261	277	288	68
25°	179	188	204	230	251	82
35°	109	118	142	175	203	67
45°	41	51	80	122	157	34
55°	20	21	32	72	104	18
65°	9	10	17	27	44	10
75°	5	7	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	307.1	307.1	307.1	307.1	307.1
2.5°	303.2	306.7	304.4	305.2	305.6
5°	295.8	300.1	299.3	302.0	305.2
7.5°	285.6	290.7	292.3	297.7	302.8
10°	273.1	279.4	282.9	291.9	298.5
12.5°	259.4	266.1	272.7	284.8	293.8
15°	244.6	251.6	261.0	276.6	287.6
17.5°	229.0	236.8	248.1	266.9	279.8
20°	212.6	220.8	234.4	255.1	270.8
22.5°	195.8	204.4	219.6	242.6	261.0
25°	178.6	187.6	204.0	230.1	250.9
27.5°	161.0	170.4	189.1	216.9	239.5
30°	143.8	152.8	173.1	203.2	227.0
32.5°	126.2	135.6	157.5	189.1	214.9
35°	108.6	118.4	141.8	175.4	203.2
37.5°	90.6	101.2	125.8	162.2	191.5
40°	73.1	83.2	110.2	148.5	179.3
42.5°	55.9	66.8	95.3	134.8	168.0
45°	40.6	50.8	80.1	122.3	156.7
47.5°	30.5	36.7	66.0	110.6	144.2
50°	26.6	27.7	52.7	97.7	130.9
52.5°	23.1	23.8	41.0	83.6	117.6
55°	19.9	20.7	31.6	71.5	103.5
57.5°	16.8	17.6	25.4	59.8	87.5
60°	14.1	14.8	21.9	47.7	72.7
62.5°	11.7	12.1	19.5	36.3	58.2
65°	9.4	10.2	16.8	26.6	44.2
67.5°	7.8	8.6	13.7	18.4	30.9
70°	6.6	8.6	11.3	12.9	19.1
72.5°	5.5	7.8	9.4	9.0	9.0
75°	4.7	7.4	7.8	7.0	7.0
77.5°	3.9	6.6	6.3	5.9	5.5
80°	3.1	5.5	5.5	4.7	4.3
82.5°	2.7	4.3	4.3	4.3	3.5
85°	2.3	3.9	3.9	3.5	2.7
87.5°	1.6	3.1	3.5	3.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)