

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: P1060460

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060460
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-S350D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

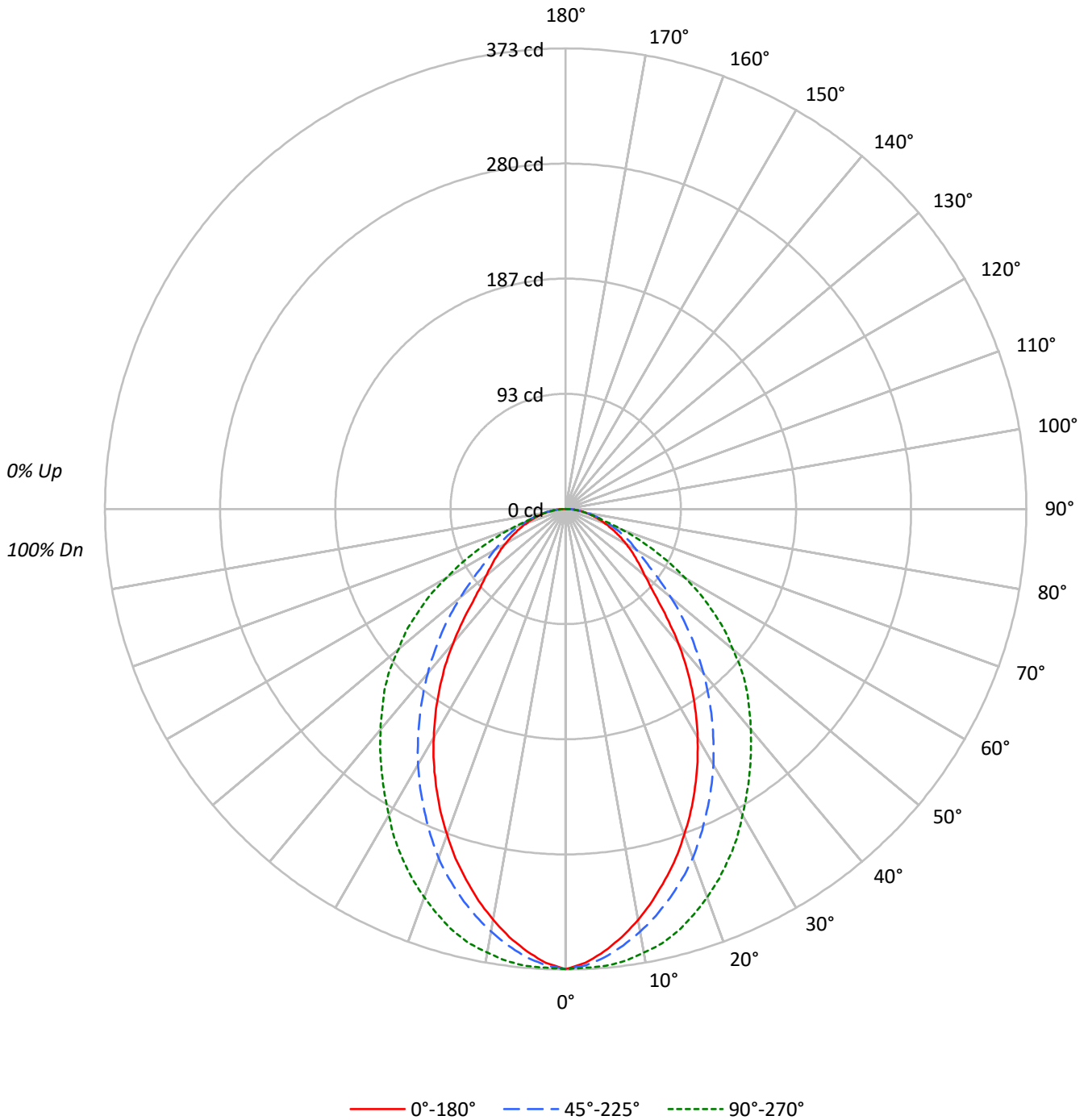
Lumens per Lamp: N/A
Luminaire Lumens: 678.4 lumens
Efficiency: N/A
Efficacy: 54.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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°	3209	3209	3209
5°	3109	3150	3211
10°	2955	3039	3190
15°	2772	2908	3151
20°	2573	2756	3067
25°	2356	2568	2969
30°	2125	2377	2847
35°	1872	2168	2731
40°	1594	1954	2621
45°	1293	1727	2526
50°	1120	1486	2366
55°	1037	1261	2193
60°	968	1137	1924
65°	907	1066	1599
70°	846	984	1209
75°	805	908	872
80°	754	833	734
85°	692	771	583

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2526 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.4	5.1
10°-20°	92.5	13.6
20°-30°	126.3	18.6
30°-40°	132.3	19.5
40°-50°	114.5	16.9
50°-60°	86.0	12.7
60°-70°	55.5	8.2
70°-80°	28.5	4.2
80°-90°	8.5	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°	253.1	37.3
0°-40°	385.4	56.8
0°-60°	586.0	86.4
0°-90°	678.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	678.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	360	365	364	367	372	34
15°	311	319	326	341	354	87
25°	248	257	270	291	312	114
35°	178	188	206	234	260	111
45°	106	117	142	177	207	84
55°	69	72	84	120	146	62
65°	44	45	52	63	78	44
75°	24	27	27	27	26	26
85°	7	8	8	7	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	372.6	372.6	372.6	372.6	372.6
2.5°	367.9	372.6	369.9	370.7	371.9
5°	359.7	365.2	364.4	367.2	371.5
7.5°	349.6	355.5	356.6	362.9	369.1
10°	337.9	344.5	347.6	357.0	364.8
12.5°	325.0	332.0	337.5	349.2	360.5
15°	310.9	318.7	326.2	341.0	353.5
17.5°	296.5	304.3	314.0	330.5	344.5
20°	280.8	289.4	300.8	318.0	334.7
22.5°	264.8	273.8	285.9	304.7	324.2
25°	248.0	257.4	270.3	291.4	312.5
27.5°	231.2	240.6	255.1	277.3	300.4
30°	213.7	223.4	239.1	263.3	286.3
32.5°	196.1	206.6	222.6	248.4	273.0
35°	178.1	188.3	206.2	233.6	259.8
37.5°	160.1	170.7	189.8	219.1	246.5
40°	141.8	152.7	173.8	204.7	233.2
42.5°	123.4	135.1	157.4	189.8	219.9
45°	106.2	117.2	141.8	176.6	207.4
47.5°	93.4	100.8	126.2	163.7	193.3
50°	83.6	87.5	110.9	149.6	176.6
52.5°	76.2	78.9	96.9	134.4	162.9
55°	69.1	71.5	84.0	119.9	146.1
57.5°	62.9	64.1	74.2	105.9	130.1
60°	56.2	57.4	66.0	90.6	111.7
62.5°	50.4	51.2	59.4	76.2	94.9
65°	44.5	45.3	52.3	63.3	78.5
67.5°	39.1	40.2	45.7	51.6	62.5
70°	33.6	35.9	39.1	41.8	48.0
72.5°	28.9	31.2	32.8	33.6	34.0
75°	24.2	27.0	27.3	27.0	26.2
77.5°	19.5	21.9	21.9	21.1	20.3
80°	15.2	17.2	16.8	16.0	14.8
82.5°	11.3	12.5	12.1	11.3	10.2
85°	7.0	8.2	7.8	7.4	5.9
87.5°	3.5	4.7	4.3	3.9	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)