

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: P1060448

Luminaire Tested: S124RDR-S350D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060448
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-S350D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

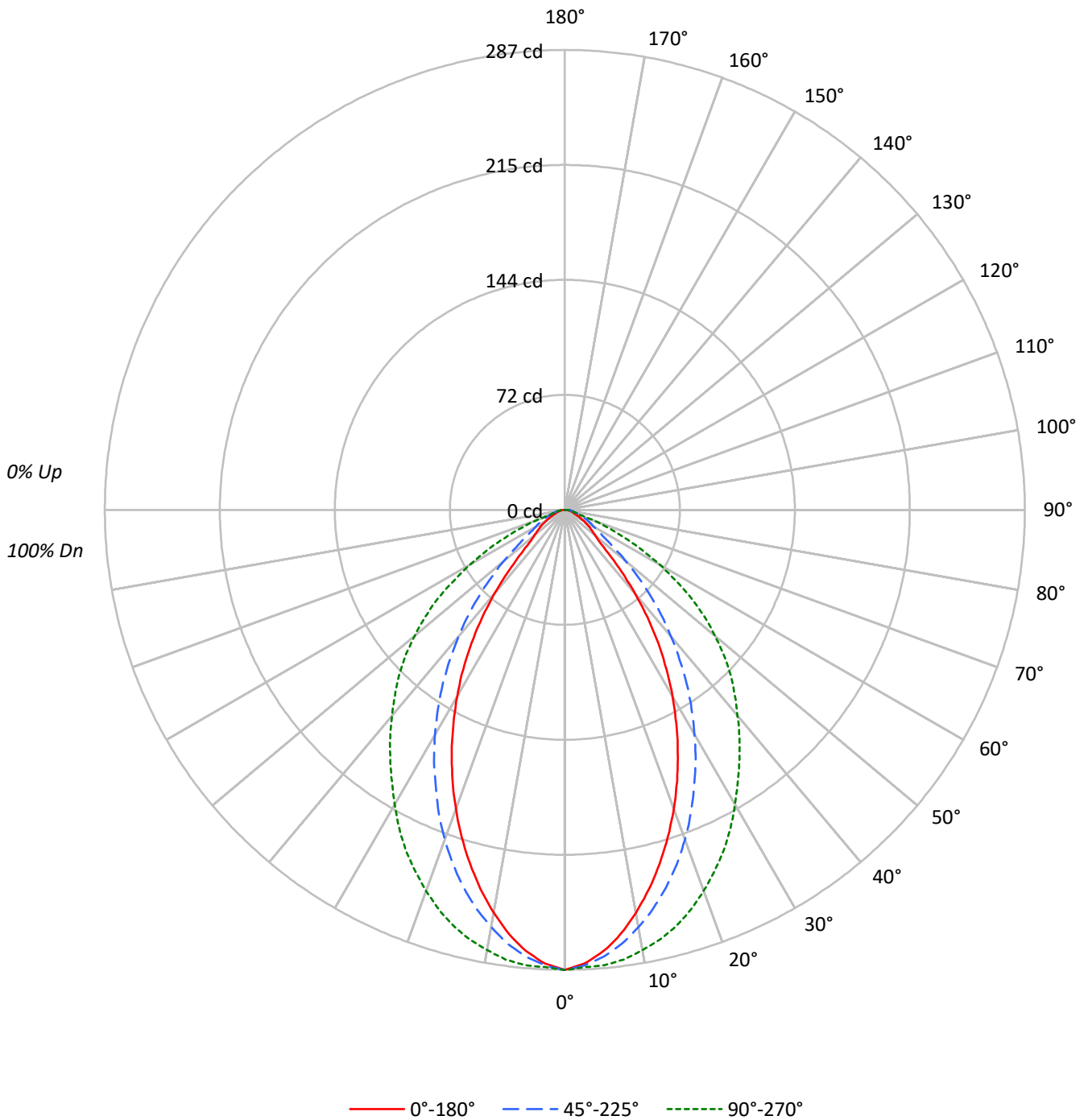
Lumens per Lamp: N/A
Luminaire Lumens: 403.7 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2472	2472	2472
5°	2390	2419	2465
10°	2232	2312	2440
15°	2038	2175	2396
20°	1821	2008	2319
25°	1586	1811	2228
30°	1336	1609	2110
35°	1067	1394	1996
40°	768	1158	1884
45°	463	912	1784
50°	332	660	1638
55°	279	444	1453
60°	226	353	1169
65°	179	320	842
70°	156	267	451
75°	146	243	220
80°	144	253	198
85°	217	366	257

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1784 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.4	6.5
10°-20°	69.0	17.1
20°-30°	89.6	22.2
30°-40°	86.1	21.3
40°-50°	63.9	15.8
50°-60°	39.1	9.7
60°-70°	19.0	4.7
70°-80°	7.2	1.8
80°-90°	3.3	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°	185.0	45.8
0°-40°	271.1	67.2
0°-60°	374.1	92.7
0°-90°	403.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	403.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	287	287	287	287	287	
5°	276	280	280	282	285	26
15°	229	235	244	259	269	64
25°	167	175	191	215	234	76
35°	102	111	133	164	190	63
45°	38	48	75	114	146	32
55°	19	19	30	67	97	17
65°	9	10	16	25	41	9
75°	4	7	7	7	7	5
85°	2	4	4	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	287.1	287.1	287.1	287.1	287.1
2.5°	283.4	286.7	284.5	285.2	285.6
5°	276.5	280.5	279.8	282.3	285.2
7.5°	267.0	271.7	273.2	278.3	283.0
10°	255.3	261.1	264.4	272.8	279.0
12.5°	242.5	248.7	254.9	266.2	274.6
15°	228.6	235.2	244.0	258.6	268.8
17.5°	214.0	221.3	231.9	249.4	261.5
20°	198.7	206.3	219.1	238.5	253.1
22.5°	183.0	191.0	205.3	226.8	244.0
25°	166.9	175.3	190.6	215.1	234.5
27.5°	150.5	159.2	176.8	202.7	223.9
30°	134.4	142.8	161.8	189.9	212.2
32.5°	118.0	126.7	147.2	176.8	200.9
35°	101.5	110.7	132.6	164.0	189.9
37.5°	84.7	94.6	117.6	151.6	179.0
40°	68.3	77.8	103.0	138.8	167.6
42.5°	52.2	62.5	89.1	126.0	157.0
45°	38.0	47.5	74.9	114.3	146.5
47.5°	28.5	34.3	61.7	103.4	134.8
50°	24.8	25.9	49.3	91.3	122.3
52.5°	21.5	22.3	38.3	78.2	109.9
55°	18.6	19.4	29.6	66.8	96.8
57.5°	15.7	16.4	23.7	55.9	81.8
60°	13.1	13.9	20.5	44.6	67.9
62.5°	11.0	11.3	18.3	34.0	54.4
65°	8.8	9.5	15.7	24.8	41.3
67.5°	7.3	8.0	12.8	17.2	28.9
70°	6.2	8.0	10.6	12.1	17.9
72.5°	5.1	7.3	8.8	8.4	8.4
75°	4.4	6.9	7.3	6.6	6.6
77.5°	3.7	6.2	5.8	5.5	5.1
80°	2.9	5.1	5.1	4.4	4.0
82.5°	2.6	4.0	4.0	4.0	3.3
85°	2.2	3.7	3.7	3.3	2.6
87.5°	1.5	2.9	3.3	2.9	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)