

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: P1060436

Luminaire Tested: S124RDR-S350D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D935-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

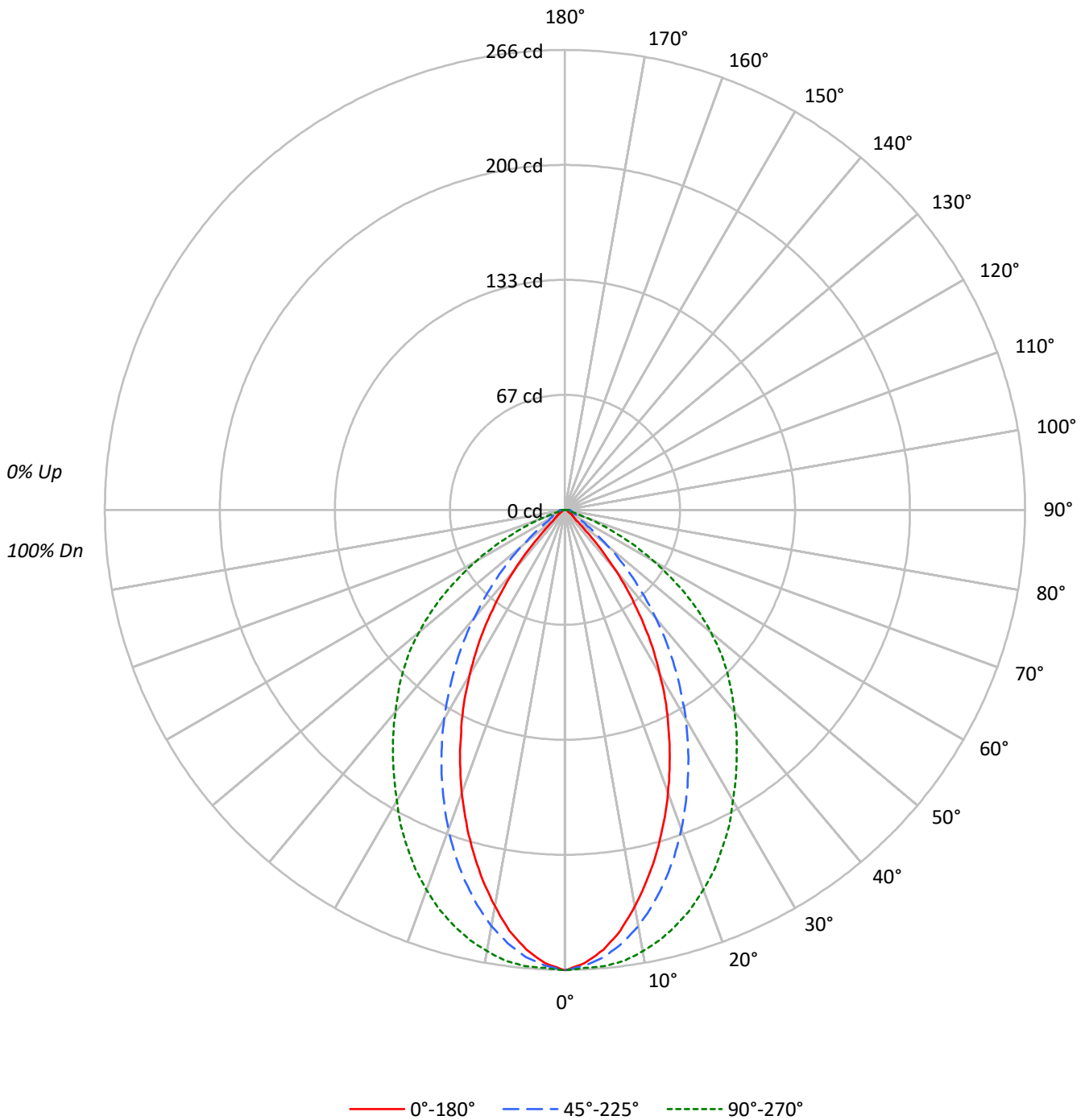
Lumens per Lamp: N/A
Luminaire Lumens: 334.2 lumens
Efficiency: N/A
Efficacy: 26.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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				
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2293	2293	2293
5°	2208	2244	2290
10°	2036	2137	2266
15°	1827	1984	2217
20°	1596	1803	2143
25°	1350	1602	2048
30°	1091	1389	1932
35°	812	1161	1821
40°	516	920	1713
45°	206	675	1615
50°	90	430	1474
55°	69	222	1287
60°	48	152	1021
65°	37	151	697
70°	35	133	320
75°	47	140	130
80°	69	159	139
85°	138	277	207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1615 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.4	7.3
10°-20°	62.9	18.8
20°-30°	79.4	23.8
30°-40°	72.9	21.8
40°-50°	49.7	14.9
50°-60°	27.0	8.1
60°-70°	11.4	3.4
70°-80°	4.0	1.2
80°-90°	2.5	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°	166.7	49.9
0°-40°	239.6	71.7
0°-60°	316.3	94.6
0°-90°	334.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	334.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	266	266	266	266	266	
5°	255	259	260	262	265	24
15°	205	212	223	238	249	57
25°	142	151	169	195	216	65
35°	77	88	110	145	173	48
45°	17	27	55	98	133	16
55°	5	5	15	54	86	4
65°	2	2	7	17	34	2
75°	1	4	4	4	4	1
85°	1	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	266.3	266.3	266.3	266.3	266.3
2.5°	262.4	265.6	263.8	264.5	265.2
5°	255.4	259.2	259.6	261.7	264.9
7.5°	245.5	250.1	252.9	258.2	263.1
10°	232.8	238.4	244.4	252.9	259.2
12.5°	219.4	225.4	234.2	246.2	254.7
15°	204.9	211.6	222.6	238.4	248.7
17.5°	189.8	197.2	210.2	228.9	242.0
20°	174.2	182.4	196.8	218.0	233.9
22.5°	158.4	166.8	182.7	206.7	225.4
25°	142.1	151.3	168.6	194.7	215.5
27.5°	126.6	135.1	154.1	182.7	205.6
30°	109.7	119.2	139.7	170.4	194.3
32.5°	94.2	103.3	124.9	157.7	183.8
35°	77.2	87.5	110.4	145.0	173.2
37.5°	61.4	71.2	96.3	133.0	163.0
40°	45.9	56.1	81.8	121.0	152.4
42.5°	30.7	41.6	68.1	108.6	142.5
45°	16.9	27.2	55.4	98.1	132.6
47.5°	8.8	14.8	43.4	87.5	122.0
50°	6.7	8.1	32.1	75.8	110.0
52.5°	5.6	6.0	21.9	64.2	98.1
55°	4.6	4.9	14.8	54.0	85.7
57.5°	3.5	3.9	10.6	44.1	72.0
60°	2.8	3.2	8.8	33.9	59.3
62.5°	2.1	2.5	8.5	25.0	46.6
65°	1.8	2.1	7.4	16.9	34.2
67.5°	1.4	2.1	6.3	10.9	22.9
70°	1.4	2.8	5.3	7.1	12.7
72.5°	1.4	3.2	4.6	4.6	4.6
75°	1.4	3.9	4.2	3.9	3.9
77.5°	1.4	3.5	3.5	3.5	3.5
80°	1.4	3.2	3.2	3.2	2.8
82.5°	1.4	2.8	3.2	3.2	2.5
85°	1.4	2.8	2.8	2.8	2.1
87.5°	1.1	2.8	2.8	2.8	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)