

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: P1060418

Luminaire Tested: S124RDR-S350D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060418
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-S350D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

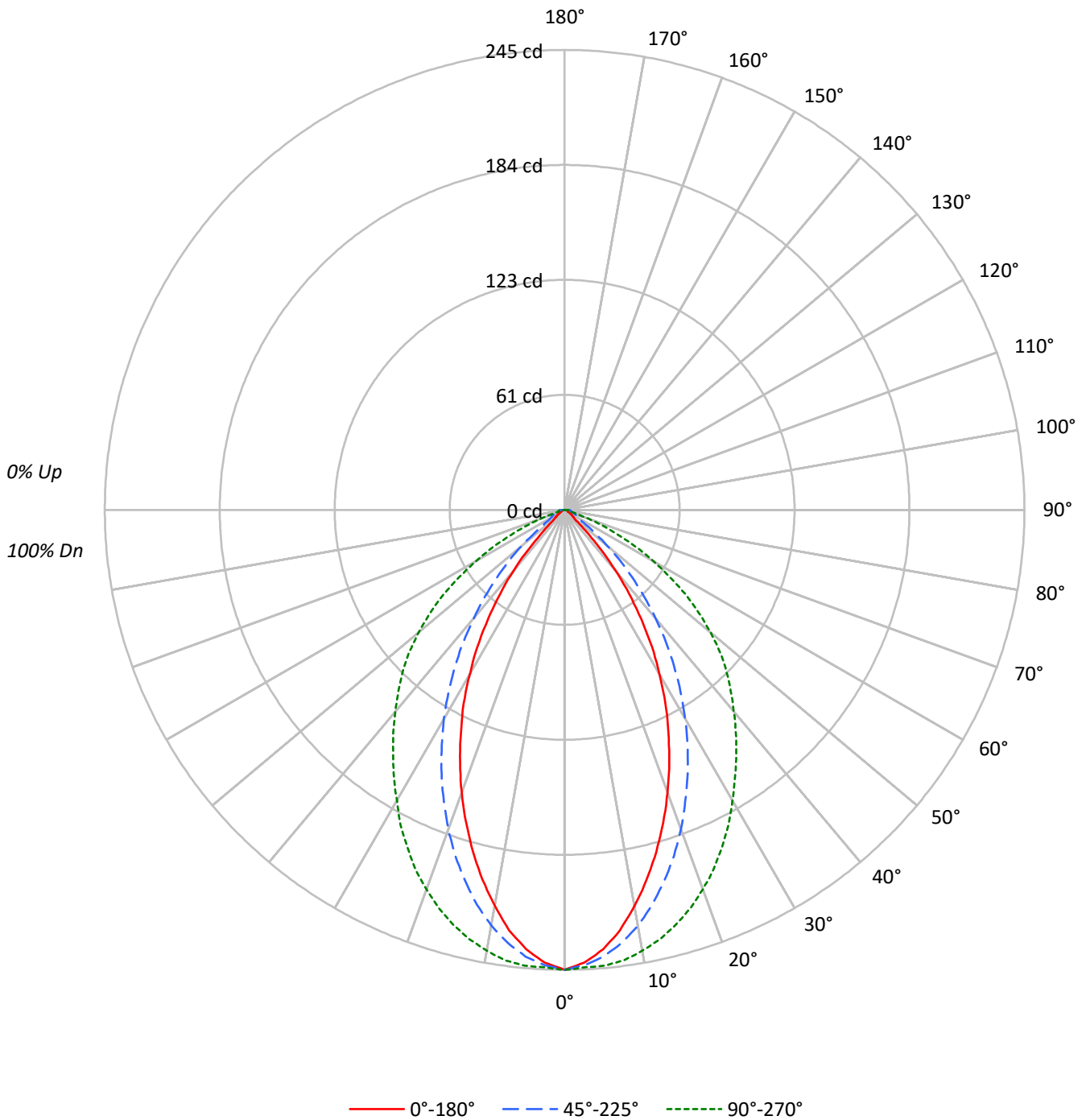
Lumens per Lamp: N/A
Luminaire Lumens: 307.5 lumens
Efficiency: N/A
Efficacy: 24.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	88	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°	2110	2110	2110
5°	2031	2064	2107
10°	1873	1967	2085
15°	1680	1826	2040
20°	1469	1660	1972
25°	1243	1474	1884
30°	1003	1278	1778
35°	747	1068	1675
40°	474	846	1576
45°	190	621	1486
50°	83	395	1357
55°	63	204	1185
60°	45	140	939
65°	33	139	642
70°	33	123	295
75°	43	130	120
80°	64	144	129
85°	128	257	188

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1486 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.4	7.3
10°-20°	57.9	18.8
20°-30°	73.1	23.8
30°-40°	67.1	21.8
40°-50°	45.8	14.9
50°-60°	24.8	8.1
60°-70°	10.5	3.4
70°-80°	3.6	1.2
80°-90°	2.3	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°	153.3	49.9
0°-40°	220.5	71.7
0°-60°	291.0	94.6
0°-90°	307.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	307.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	245	245	245	245	245	
5°	235	238	239	241	244	22
15°	188	195	205	219	229	53
25°	131	139	155	179	198	60
35°	71	80	102	133	159	44
45°	16	25	51	90	122	14
55°	4	4	14	50	79	4
65°	2	2	7	16	32	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°	245.0	245.0	245.0	245.0	245.0
2.5°	241.4	244.4	242.7	243.4	244.0
5°	235.0	238.5	238.8	240.8	243.7
7.5°	225.9	230.1	232.7	237.6	242.1
10°	214.2	219.4	224.9	232.7	238.5
12.5°	201.9	207.4	215.5	226.5	234.3
15°	188.5	194.7	204.8	219.4	228.8
17.5°	174.6	181.4	193.4	210.6	222.6
20°	160.3	167.8	181.1	200.6	215.2
22.5°	145.7	153.5	168.1	190.2	207.4
25°	130.8	139.2	155.1	179.1	198.3
27.5°	116.5	124.3	141.8	168.1	189.2
30°	100.9	109.7	128.5	156.7	178.8
32.5°	86.6	95.1	114.9	145.1	169.1
35°	71.1	80.5	101.6	133.4	159.3
37.5°	56.5	65.6	88.6	122.3	149.9
40°	42.2	51.6	75.3	111.3	140.2
42.5°	28.2	38.3	62.6	100.0	131.1
45°	15.6	25.0	51.0	90.2	122.0
47.5°	8.1	13.6	39.9	80.5	112.3
50°	6.2	7.5	29.5	69.8	101.3
52.5°	5.2	5.5	20.1	59.1	90.2
55°	4.2	4.5	13.6	49.7	78.9
57.5°	3.2	3.6	9.7	40.6	66.2
60°	2.6	2.9	8.1	31.2	54.5
62.5°	1.9	2.3	7.8	23.0	42.8
65°	1.6	1.9	6.8	15.6	31.5
67.5°	1.3	1.9	5.8	10.1	21.1
70°	1.3	2.6	4.9	6.5	11.7
72.5°	1.3	2.9	4.2	4.2	4.2
75°	1.3	3.6	3.9	3.6	3.6
77.5°	1.3	3.2	3.2	3.2	3.2
80°	1.3	2.9	2.9	2.9	2.6
82.5°	1.3	2.6	2.9	2.9	2.3
85°	1.3	2.6	2.6	2.6	1.9
87.5°	1.0	2.6	2.6	2.6	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)