

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: P1060426

Luminaire Tested: S124RDR-S350D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060426
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

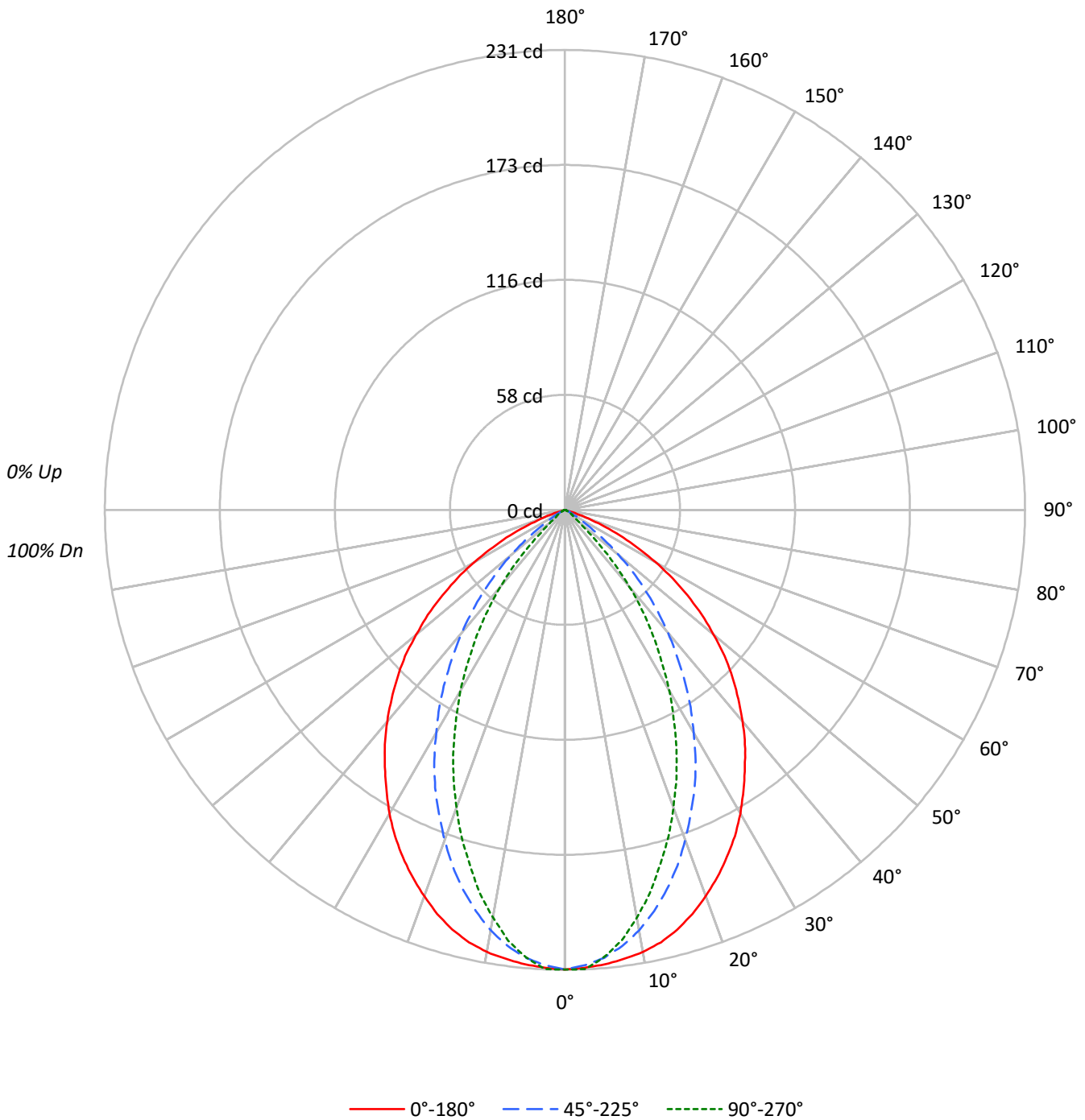
Lumens per Lamp: N/A
Luminaire Lumens: 301.5 lumens
Efficiency: N/A
Efficacy: 24.1 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1988	1988	1988
5°	1981	1953	1949
10°	1972	1876	1818
15°	1945	1761	1645
20°	1892	1617	1458
25°	1829	1464	1259
30°	1752	1284	1042
35°	1656	1102	810
40°	1560	904	567
45°	1447	695	280
50°	1305	469	94
55°	1127	240	65
60°	902	86	47
65°	619	47	20
70°	277	25	18
75°	0	10	10
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1447 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.3	7.1
10°-20°	55.9	18.5
20°-30°	72.3	24.0
30°-40°	68.7	22.8
40°-50°	48.7	16.1
50°-60°	25.0	8.3
60°-70°	8.7	2.9
70°-80°	0.7	0.2
80°-90°	0.0	0.0
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°	149.6	49.6
0°-40°	218.3	72.4
0°-60°	292.0	96.9
0°-90°	301.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	301.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	231	231	231	231	231	
5°	229	230	226	226	226	22
15°	218	212	198	188	184	61
25°	192	178	154	138	132	89
35°	158	134	105	84	77	99
45°	119	91	57	33	23	91
55°	75	49	16	5	4	67
65°	30	15	2	1	1	30
75°	0	0	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	230.9	230.9	230.9	230.9	230.9
2.5°	230.2	230.9	228.9	230.5	230.9
5°	229.2	229.5	225.9	225.9	225.5
7.5°	227.5	226.9	220.9	218.5	218.2
10°	225.5	223.2	214.5	209.5	207.9
12.5°	222.5	218.2	206.5	199.2	197.2
15°	218.2	211.5	197.5	188.2	184.5
17.5°	212.9	204.2	187.5	176.2	172.5
20°	206.5	195.5	176.5	163.8	159.1
22.5°	199.8	187.2	165.1	150.8	146.1
25°	192.5	177.5	154.1	137.8	132.5
27.5°	184.8	167.1	142.1	125.1	118.1
30°	176.2	156.8	129.1	111.4	104.8
32.5°	166.8	145.5	117.4	98.4	90.4
35°	157.5	134.5	104.8	84.4	77.1
37.5°	148.5	124.1	92.1	70.7	63.7
40°	138.8	112.8	80.4	58.4	50.4
42.5°	128.8	101.8	68.4	45.7	37.0
45°	118.8	91.4	57.1	32.7	23.0
47.5°	108.8	80.4	46.0	20.7	12.3
50°	97.4	69.7	35.0	11.0	7.0
52.5°	86.7	59.7	25.0	6.3	5.3
55°	75.1	49.4	16.0	4.7	4.3
57.5°	64.1	39.4	9.0	3.7	3.3
60°	52.4	30.4	5.0	3.0	2.7
62.5°	40.7	22.0	3.3	2.0	1.7
65°	30.4	14.7	2.3	1.3	1.0
67.5°	20.0	8.3	1.7	0.7	0.7
70°	11.0	4.0	1.0	0.7	0.7
72.5°	4.0	1.3	0.7	0.3	0.3
75°	0.0	0.3	0.3	0.3	0.3
77.5°	0.0	0.0	0.0	0.0	0.3
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)