

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: P1060382

Luminaire Tested: S124RDR-S350D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060382
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-S350D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

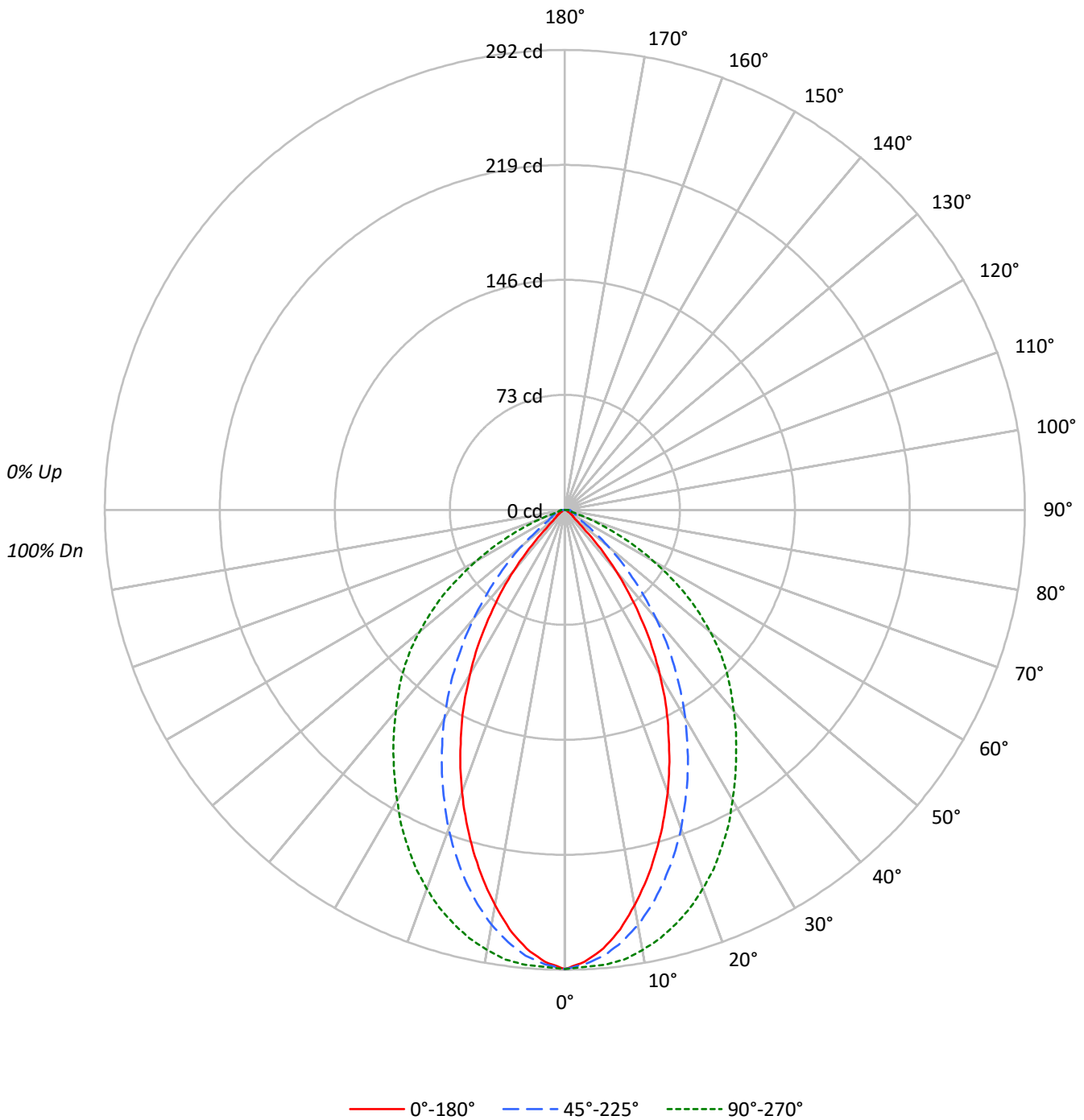
Lumens per Lamp: N/A
Luminaire Lumens: 365.9 lumens
Efficiency: N/A
Efficacy: 29.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060382

CATALOG NUMBER: S124RDR-S350D830-X4F0-XX-UDD-BVL-S

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	108	105	102	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°	2510	2510	2510
5°	2417	2457	2507
10°	2228	2340	2482
15°	2000	2172	2427
20°	1748	1975	2346
25°	1478	1754	2241
30°	1194	1520	2116
35°	889	1271	1993
40°	564	1007	1875
45°	225	738	1768
50°	98	470	1614
55°	75	243	1408
60°	53	167	1118
65°	39	165	764
70°	38	146	350
75°	50	153	140
80°	74	174	154
85°	148	306	227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1768 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	7.3
10°-20°	68.8	18.8
20°-30°	86.9	23.8
30°-40°	79.9	21.8
40°-50°	54.4	14.9
50°-60°	29.5	8.1
60°-70°	12.5	3.4
70°-80°	4.3	1.2
80°-90°	2.8	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°	182.4	49.9
0°-40°	262.3	71.7
0°-60°	346.3	94.6
0°-90°	365.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	365.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	292	292	292	292	292	
5°	280	284	284	286	290	26
15°	224	232	244	261	272	62
25°	156	166	185	213	236	71
35°	85	96	121	159	190	53
45°	18	30	61	107	145	17
55°	5	5	16	59	94	5
65°	2	2	8	18	38	2
75°	2	4	5	4	4	2
85°	2	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°	291.5	291.5	291.5	291.5	291.5
2.5°	287.3	290.7	288.8	289.6	290.4
5°	279.6	283.8	284.2	286.5	290.0
7.5°	268.7	273.8	276.8	282.6	288.0
10°	254.8	261.0	267.6	276.8	283.8
12.5°	240.2	246.7	256.4	269.5	278.8
15°	224.3	231.7	243.6	261.0	272.2
17.5°	207.7	215.8	230.1	250.6	264.9
20°	190.7	199.6	215.5	238.6	256.0
22.5°	173.4	182.6	200.0	226.3	246.7
25°	155.6	165.6	184.6	213.1	235.9
27.5°	138.6	147.9	168.7	200.0	225.1
30°	120.1	130.5	152.9	186.5	212.8
32.5°	103.1	113.1	136.7	172.6	201.2
35°	84.6	95.8	120.9	158.7	189.6
37.5°	67.2	78.0	105.4	145.6	178.4
40°	50.2	61.4	89.6	132.4	166.8
42.5°	33.6	45.6	74.5	118.9	156.0
45°	18.5	29.7	60.6	107.3	145.2
47.5°	9.7	16.2	47.5	95.8	133.6
50°	7.3	8.9	35.1	83.0	120.5
52.5°	6.2	6.6	23.9	70.3	107.3
55°	5.0	5.4	16.2	59.1	93.8
57.5°	3.9	4.2	11.6	48.3	78.8
60°	3.1	3.5	9.7	37.1	64.9
62.5°	2.3	2.7	9.3	27.4	51.0
65°	1.9	2.3	8.1	18.5	37.5
67.5°	1.5	2.3	7.0	12.0	25.1
70°	1.5	3.1	5.8	7.7	13.9
72.5°	1.5	3.5	5.0	5.0	5.0
75°	1.5	4.2	4.6	4.2	4.2
77.5°	1.5	3.9	3.9	3.9	3.9
80°	1.5	3.5	3.5	3.5	3.1
82.5°	1.5	3.1	3.5	3.5	2.7
85°	1.5	3.1	3.1	3.1	2.3
87.5°	1.2	3.1	3.1	3.1	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)