

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: P1060402

Luminaire Tested: S124RDR-S350D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060402
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

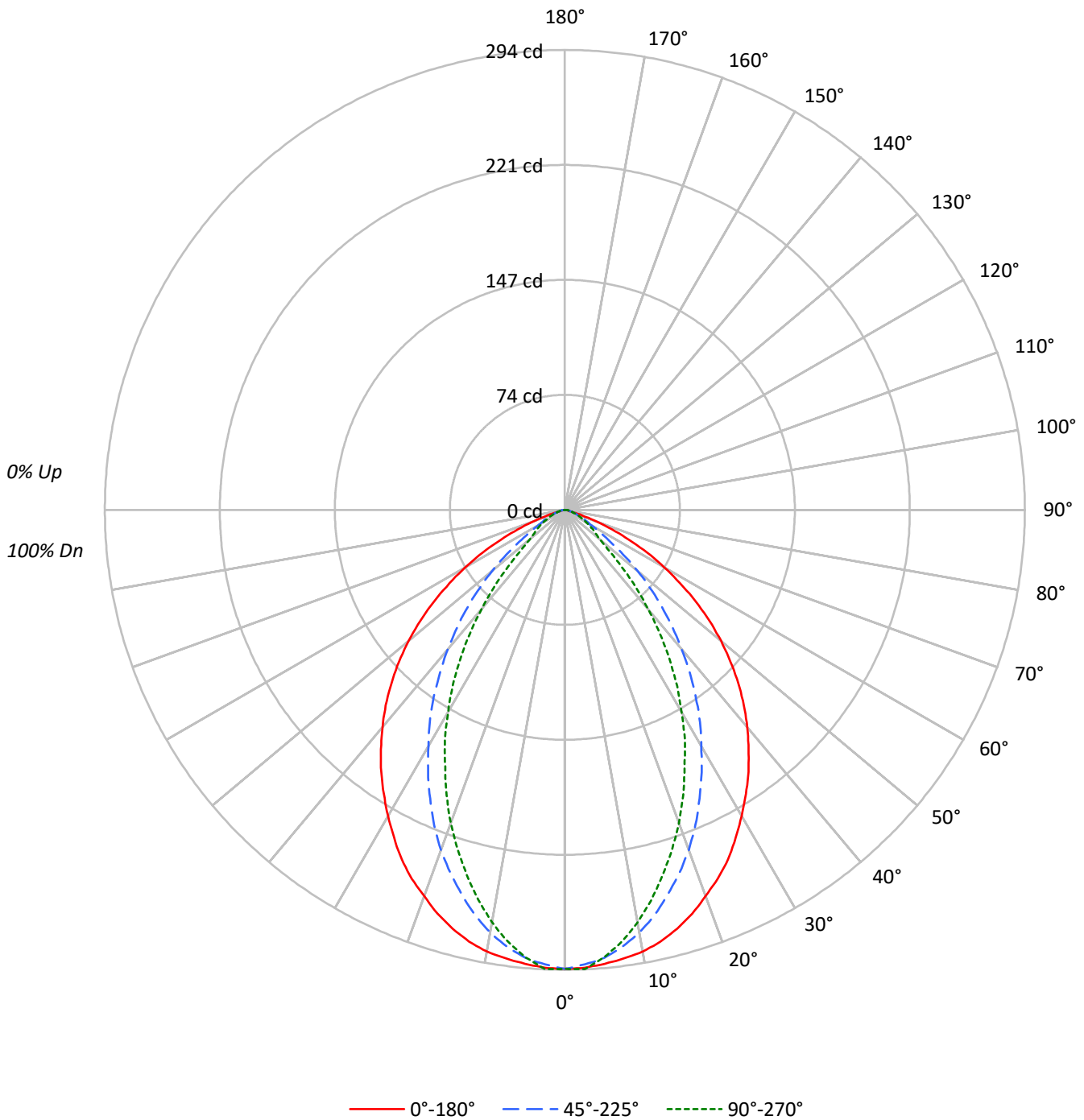
Lumens per Lamp: N/A
Luminaire Lumens: 432.6 lumens
Efficiency: N/A
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	64	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	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2527	2527	2527
5°	2518	2486	2483
10°	2508	2399	2342
15°	2472	2270	2155
20°	2408	2120	1954
25°	2344	1935	1720
30°	2247	1734	1484
35°	2151	1534	1225
40°	2039	1305	929
45°	1907	1067	624
50°	1744	808	387
55°	1533	533	329
60°	1268	327	270
65°	917	253	218
70°	499	186	166
75°	110	136	150
80°	84	104	124
85°	79	79	119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1907 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.2	6.3
10°-20°	72.2	16.7
20°-30°	95.6	22.1
30°-40°	94.9	21.9
40°-50°	73.1	16.9
50°-60°	43.5	10.1
60°-70°	19.8	4.6
70°-80°	5.1	1.2
80°-90°	1.1	0.3
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°	195.0	45.1
0°-40°	290.0	67.0
0°-60°	406.5	94.0
0°-90°	432.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	432.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	293	293	293	293	293	
5°	291	292	288	288	287	28
15°	277	270	255	246	242	78
25°	247	229	204	187	181	113
35°	205	179	146	124	116	128
45°	157	126	88	61	51	121
55°	102	73	36	22	22	91
65°	45	27	12	11	11	45
75°	3	4	4	4	4	7
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	293.4	293.4	293.4	293.4	293.4
2.5°	293.0	293.4	290.9	293.0	293.8
5°	291.3	291.8	287.6	287.6	287.2
7.5°	289.3	288.4	281.8	279.4	278.5
10°	286.8	283.9	274.4	269.4	267.8
12.5°	282.7	278.1	265.3	258.3	255.4
15°	277.3	270.3	254.6	245.9	241.7
17.5°	270.7	262.0	243.4	232.2	227.7
20°	262.8	251.3	231.4	217.4	213.2
22.5°	255.4	240.9	218.2	202.1	197.5
25°	246.7	228.9	203.7	186.8	181.0
27.5°	236.4	217.4	189.3	171.9	166.1
30°	226.0	205.0	174.4	156.2	149.2
32.5°	215.3	192.2	160.8	140.1	133.5
35°	204.6	178.9	145.9	123.6	116.5
37.5°	193.0	165.7	131.0	107.9	100.0
40°	181.4	152.9	116.1	92.6	82.6
42.5°	169.4	139.7	101.7	76.9	66.9
45°	156.6	126.0	87.6	61.2	51.2
47.5°	143.8	113.2	73.6	45.9	36.8
50°	130.2	99.6	60.3	33.5	28.9
52.5°	116.5	86.4	47.1	26.0	24.8
55°	102.1	72.7	35.5	22.3	21.9
57.5°	87.2	60.3	25.6	19.4	18.6
60°	73.6	48.8	19.0	16.5	15.7
62.5°	59.5	36.8	15.7	13.6	12.8
65°	45.0	26.9	12.4	10.7	10.7
67.5°	32.6	18.2	9.9	8.7	8.3
70°	19.8	11.2	7.4	7.0	6.6
72.5°	9.9	6.6	5.8	5.4	5.4
75°	3.3	4.1	4.1	4.5	4.5
77.5°	2.5	2.9	2.9	3.3	3.3
80°	1.7	2.1	2.1	2.5	2.5
82.5°	1.2	1.2	1.7	1.7	2.1
85°	0.8	0.8	0.8	1.2	1.2
87.5°	0.4	0.4	0.4	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)