

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: P1060400

Luminaire Tested: S124RDR-S350D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060400
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-S350D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

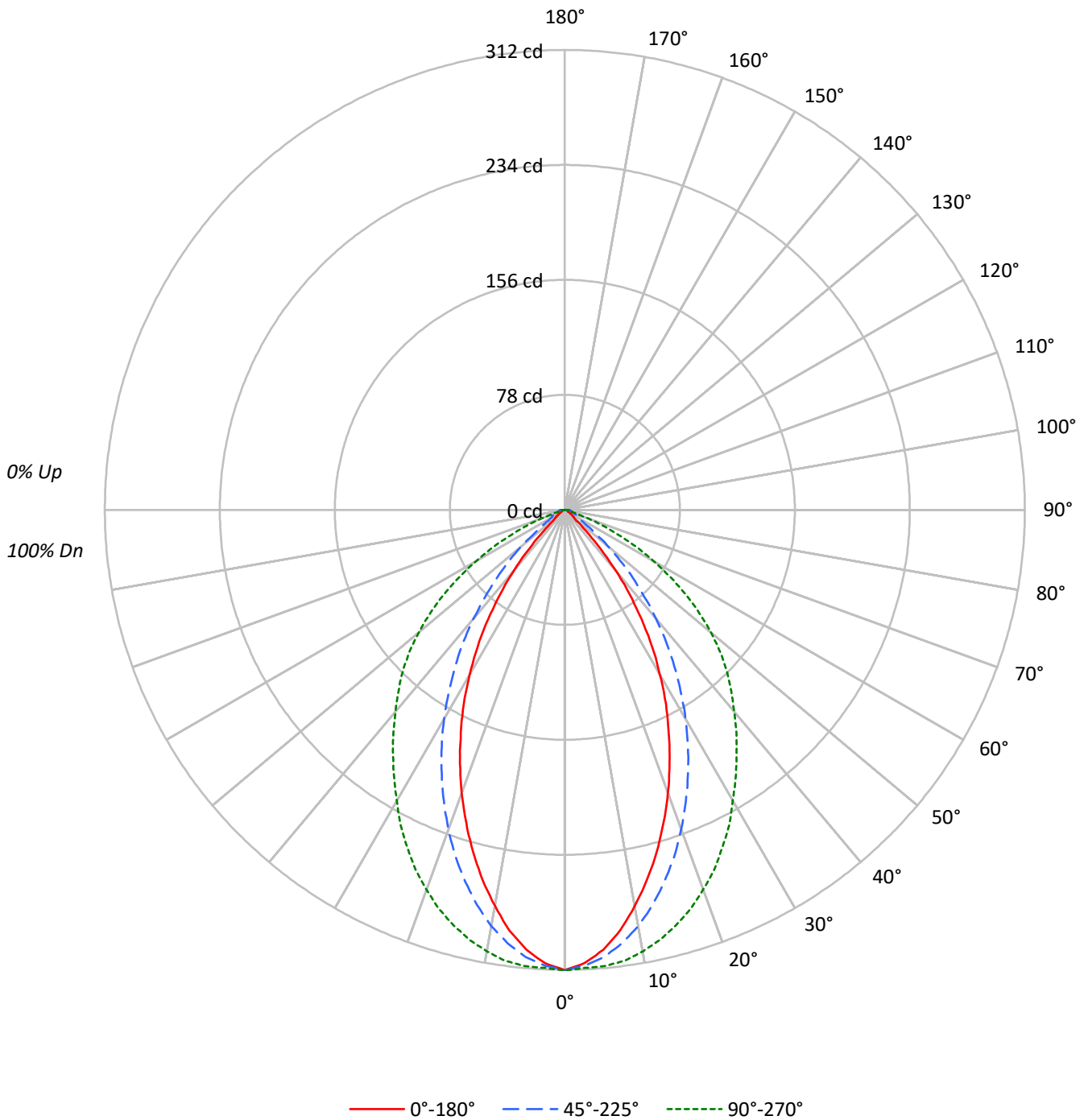
Lumens per Lamp: N/A
Luminaire Lumens: 392.0 lumens
Efficiency: N/A
Efficacy: 31.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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: P1060400

CATALOG NUMBER: S124RDR-S350D840-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	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°	2689	2689	2689
5°	2589	2632	2686
10°	2387	2507	2659
15°	2143	2327	2600
20°	1873	2115	2514
25°	1584	1878	2402
30°	1280	1629	2266
35°	952	1361	2135
40°	605	1079	2009
45°	242	792	1895
50°	106	504	1729
55°	81	261	1509
60°	57	177	1197
65°	43	177	817
70°	43	156	375
75°	57	166	153
80°	84	183	164
85°	168	326	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1895 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.6	7.3
10°-20°	73.8	18.8
20°-30°	93.1	23.8
30°-40°	85.6	21.8
40°-50°	58.3	14.9
50°-60°	31.6	8.1
60°-70°	13.4	3.4
70°-80°	4.6	1.2
80°-90°	2.9	0.7
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°	195.5	49.9
0°-40°	281.0	71.7
0°-60°	371.0	94.6
0°-90°	392.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	392.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	312	312	312	312	312	
5°	300	304	304	307	311	28
15°	240	248	261	280	292	67
25°	167	178	198	228	253	76
35°	91	103	130	170	203	56
45°	20	32	65	115	156	18
55°	5	6	17	63	100	5
65°	2	2	9	20	40	2
75°	2	5	5	5	5	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°	312.3	312.3	312.3	312.3	312.3
2.5°	307.8	311.5	309.4	310.3	311.1
5°	299.5	304.1	304.5	307.0	310.7
7.5°	287.9	293.3	296.6	302.8	308.6
10°	273.0	279.7	286.7	296.6	304.1
12.5°	257.3	264.4	274.7	288.8	298.7
15°	240.4	248.2	261.0	279.7	291.7
17.5°	222.6	231.3	246.6	268.5	283.8
20°	204.4	213.9	230.8	255.7	274.3
22.5°	185.8	195.7	214.3	242.4	264.4
25°	166.7	177.5	197.7	228.4	252.8
27.5°	148.5	158.4	180.8	214.3	241.2
30°	128.7	139.8	163.8	199.8	227.9
32.5°	110.5	121.2	146.5	184.9	215.5
35°	90.6	102.6	129.5	170.0	203.1
37.5°	72.0	83.6	112.9	156.0	191.1
40°	53.8	65.8	96.0	141.9	178.7
42.5°	36.0	48.8	79.8	127.4	167.1
45°	19.9	31.9	65.0	115.0	155.6
47.5°	10.3	17.4	50.9	102.6	143.1
50°	7.9	9.5	37.6	88.9	129.1
52.5°	6.6	7.0	25.6	75.3	115.0
55°	5.4	5.8	17.4	63.3	100.5
57.5°	4.1	4.6	12.4	51.7	84.4
60°	3.3	3.7	10.3	39.7	69.5
62.5°	2.5	2.9	9.9	29.4	54.6
65°	2.1	2.5	8.7	19.9	40.1
67.5°	1.7	2.5	7.4	12.8	26.9
70°	1.7	3.3	6.2	8.3	14.9
72.5°	1.7	3.7	5.4	5.4	5.4
75°	1.7	4.6	5.0	4.6	4.6
77.5°	1.7	4.1	4.1	4.1	4.1
80°	1.7	3.7	3.7	3.7	3.3
82.5°	1.7	3.3	3.7	3.7	2.9
85°	1.7	3.3	3.3	3.3	2.5
87.5°	1.2	3.3	3.3	3.3	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)