

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: P1060431

Luminaire Tested: S124RDR-S350D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D930-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

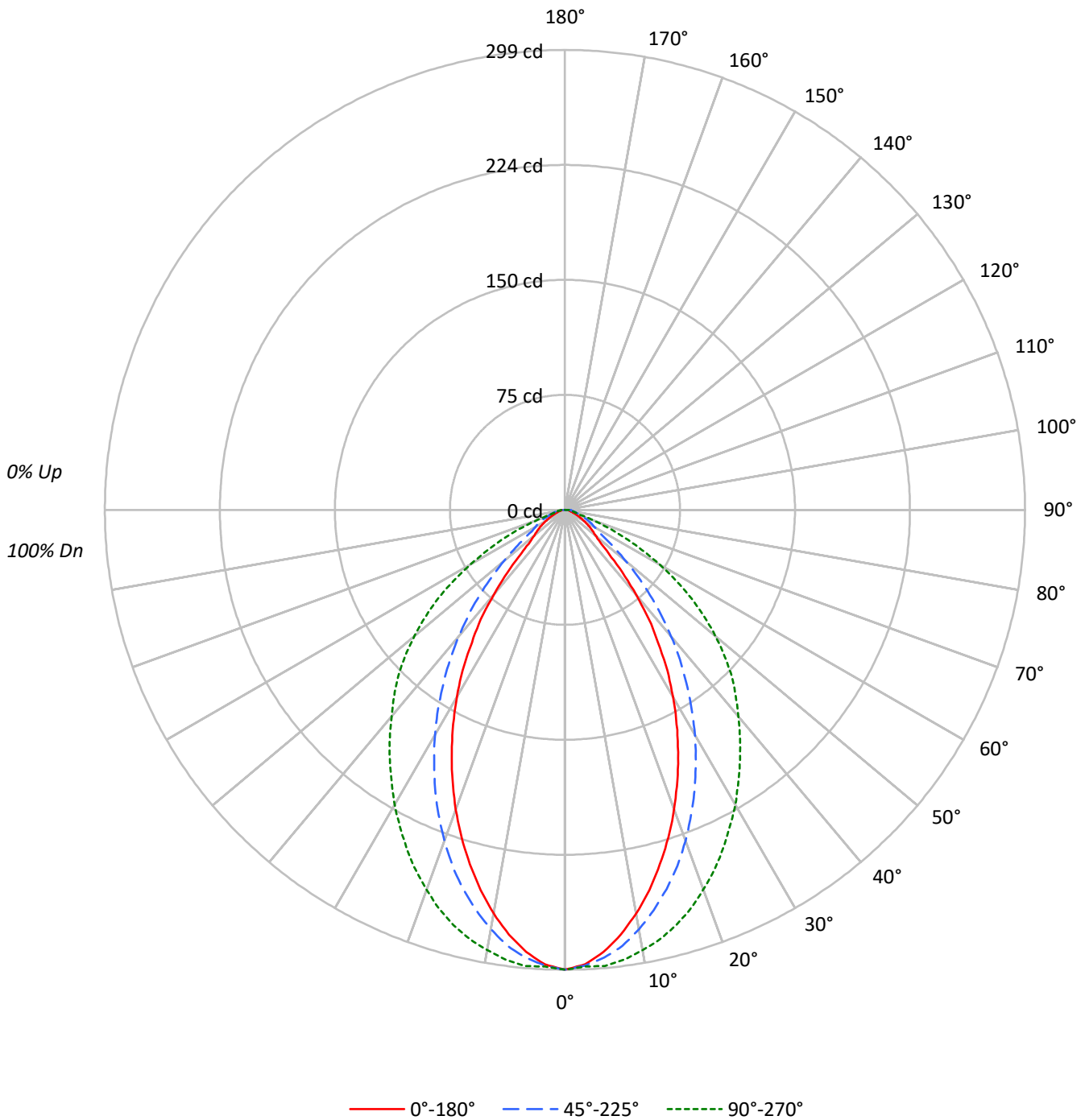
Lumens per Lamp: N/A
Luminaire Lumens: 423.1 lumens
Efficiency: N/A
Efficacy: 33.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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										
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	50	30	10	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100															
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89															
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79															
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70					70															
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63					63															
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57					57															
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51					51															
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47					47															
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43					43															
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39															
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36					36															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2574	2574	2574
5°	2495	2526	2572
10°	2330	2421	2541
15°	2126	2275	2492
20°	1901	2099	2408
25°	1653	1897	2310
30°	1395	1680	2201
35°	1109	1446	2086
40°	807	1205	1971
45°	488	952	1867
50°	350	689	1709
55°	296	467	1509
60°	241	379	1219
65°	192	340	878
70°	159	287	463
75°	143	266	233
80°	149	263	233
85°	198	395	267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1867 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.5	6.5
10°-20°	72.1	17.0
20°-30°	93.5	22.1
30°-40°	90.0	21.3
40°-50°	67.0	15.8
50°-60°	41.2	9.7
60°-70°	20.2	4.8
70°-80°	7.9	1.9
80°-90°	3.6	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°	193.2	45.7
0°-40°	283.2	66.9
0°-60°	391.4	92.5
0°-90°	423.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	423.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	299	299	299	299	299	
5°	289	293	292	295	298	27
15°	238	246	255	270	280	67
25°	174	183	200	225	243	80
35°	106	116	138	172	198	66
45°	40	50	78	121	153	33
55°	20	20	31	71	100	18
65°	9	10	17	27	43	10
75°	4	8	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	298.9	298.9	298.9	298.9	298.9
2.5°	295.9	299.3	296.6	296.9	297.2
5°	288.6	292.9	292.2	294.9	297.6
7.5°	278.5	283.6	285.9	291.2	294.9
10°	266.5	272.2	276.9	285.6	290.6
12.5°	253.2	259.8	266.5	278.2	285.9
15°	238.5	246.1	255.2	270.5	279.5
17.5°	223.4	231.1	242.8	260.5	271.9
20°	207.4	215.8	229.1	248.8	262.8
22.5°	190.7	199.7	214.4	236.8	253.5
25°	174.0	183.4	199.7	224.8	243.1
27.5°	157.3	166.3	184.0	212.1	232.1
30°	140.3	149.6	169.0	198.4	221.4
32.5°	123.9	132.6	153.3	185.4	209.7
35°	105.5	115.6	137.6	172.0	198.4
37.5°	89.8	98.9	122.6	158.6	187.0
40°	71.8	81.8	107.2	145.6	175.3
42.5°	55.1	65.1	92.5	132.6	164.3
45°	40.1	49.8	78.2	120.6	153.3
47.5°	30.4	36.1	64.1	108.9	140.9
50°	26.1	27.7	51.4	96.2	127.6
52.5°	23.0	23.7	40.1	83.5	114.2
55°	19.7	20.4	31.1	70.8	100.5
57.5°	16.7	17.0	25.0	58.8	85.8
60°	14.0	14.4	22.0	47.1	70.8
62.5°	11.7	12.0	19.7	36.4	56.4
65°	9.4	10.0	16.7	26.7	43.1
67.5°	7.7	9.0	14.0	18.7	30.1
70°	6.3	8.7	11.4	13.0	18.4
72.5°	5.3	8.0	9.7	9.4	9.0
75°	4.3	7.7	8.0	7.3	7.0
77.5°	3.7	6.7	6.7	6.0	5.7
80°	3.0	5.3	5.3	5.3	4.7
82.5°	2.7	4.3	4.7	4.7	3.7
85°	2.0	3.7	4.0	4.0	2.7
87.5°	1.3	3.3	3.7	3.3	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)