

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: P1060422

Luminaire Tested: S124RDR-S350D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060422
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-S350D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

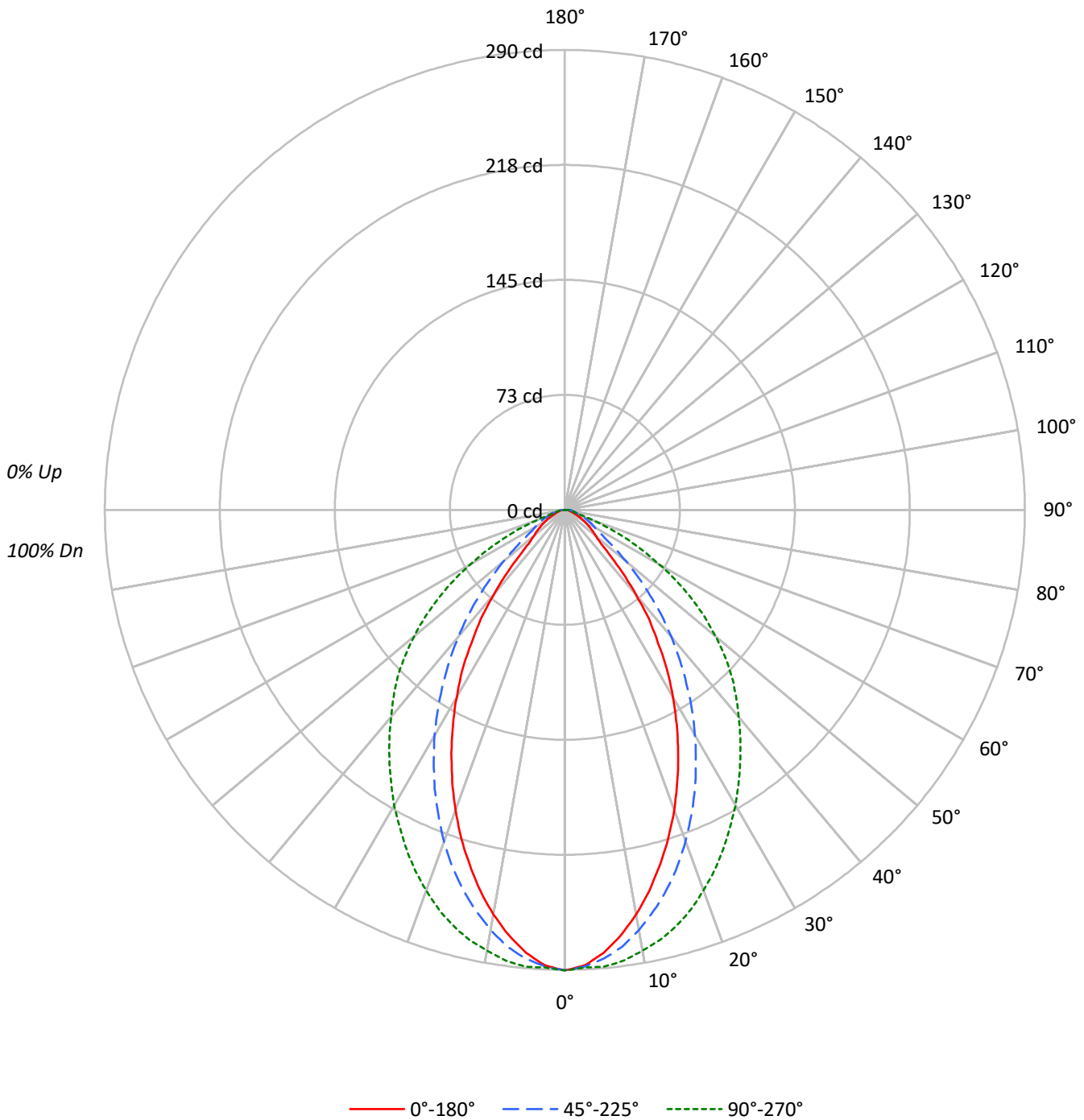
Lumens per Lamp: N/A
Luminaire Lumens: 411.1 lumens
Efficiency: N/A
Efficacy: 32.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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					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	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°	2501	2501	2501
5°	2424	2455	2499
10°	2265	2352	2468
15°	2066	2210	2421
20°	1847	2040	2340
25°	1607	1844	2244
30°	1355	1633	2140
35°	1078	1405	2027
40°	785	1171	1915
45°	474	924	1815
50°	339	670	1661
55°	287	453	1467
60°	234	369	1185
65°	185	330	854
70°	156	277	448
75°	140	260	226
80°	144	258	223
85°	188	385	257

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1815 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	6.5
10°-20°	70.1	17.0
20°-30°	90.9	22.1
30°-40°	87.5	21.3
40°-50°	65.1	15.8
50°-60°	40.0	9.7
60°-70°	19.7	4.8
70°-80°	7.7	1.9
80°-90°	3.5	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°	187.7	45.7
0°-40°	275.2	66.9
0°-60°	380.3	92.5
0°-90°	411.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	411.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	280	285	284	286	289	26
15°	232	239	248	263	272	65
25°	169	178	194	218	236	77
35°	102	112	134	167	193	64
45°	39	48	76	117	149	32
55°	19	20	30	69	98	17
65°	9	10	16	26	42	9
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°	290.4	290.4	290.4	290.4	290.4
2.5°	287.5	290.8	288.2	288.5	288.8
5°	280.4	284.6	284.0	286.5	289.1
7.5°	270.6	275.5	277.8	283.0	286.5
10°	259.0	264.5	269.0	277.5	282.3
12.5°	246.0	252.5	259.0	270.3	277.8
15°	231.7	239.2	247.9	262.9	271.6
17.5°	217.1	224.6	235.9	253.1	264.2
20°	201.5	209.6	222.6	241.8	255.4
22.5°	185.3	194.1	208.3	230.1	246.3
25°	169.1	178.2	194.1	218.4	236.2
27.5°	152.8	161.6	178.8	206.1	225.5
30°	136.3	145.4	164.2	192.8	215.2
32.5°	120.4	128.8	149.0	180.1	203.8
35°	102.5	112.3	133.7	167.1	192.8
37.5°	87.3	96.1	119.1	154.1	181.7
40°	69.8	79.5	104.2	141.5	170.4
42.5°	53.5	63.3	89.9	128.8	159.7
45°	38.9	48.4	75.9	117.2	149.0
47.5°	29.5	35.0	62.3	105.8	136.9
50°	25.3	26.9	50.0	93.5	124.0
52.5°	22.4	23.0	38.9	81.1	111.0
55°	19.1	19.8	30.2	68.8	97.7
57.5°	16.2	16.6	24.3	57.1	83.4
60°	13.6	14.0	21.4	45.8	68.8
62.5°	11.4	11.7	19.1	35.4	54.8
65°	9.1	9.7	16.2	26.0	41.9
67.5°	7.5	8.8	13.6	18.2	29.2
70°	6.2	8.4	11.0	12.7	17.8
72.5°	5.2	7.8	9.4	9.1	8.8
75°	4.2	7.5	7.8	7.1	6.8
77.5°	3.6	6.5	6.5	5.8	5.5
80°	2.9	5.2	5.2	5.2	4.5
82.5°	2.6	4.2	4.5	4.5	3.6
85°	1.9	3.6	3.9	3.9	2.6
87.5°	1.3	3.2	3.6	3.2	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)