

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: P1060419

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060419
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

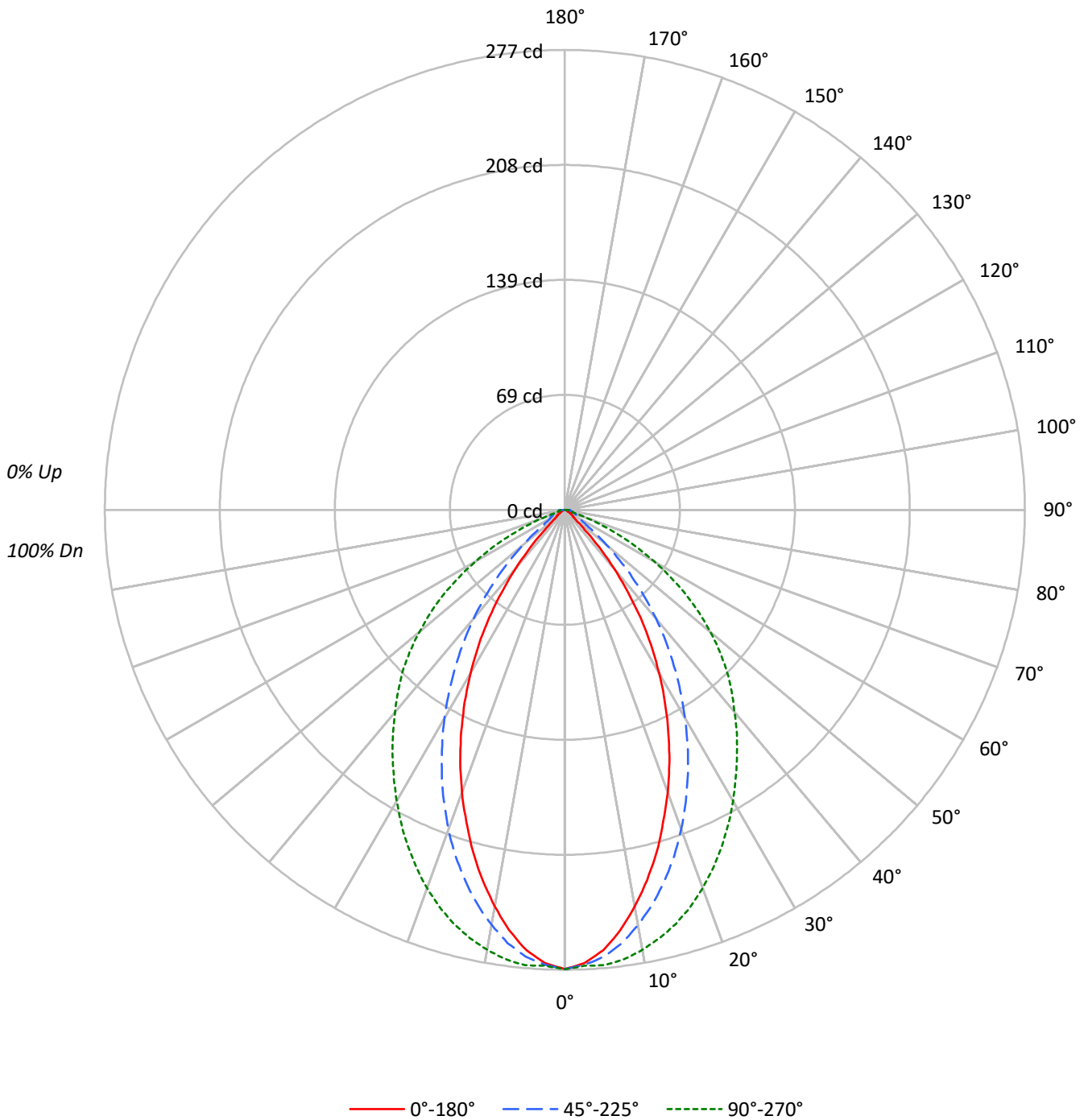
Lumens per Lamp: N/A
Luminaire Lumens: 348.6 lumens
Efficiency: N/A
Efficacy: 27.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2382	2382	2382
5°	2301	2335	2380
10°	2120	2219	2353
15°	1904	2063	2301
20°	1660	1877	2222
25°	1400	1666	2124
30°	1130	1440	2014
35°	836	1205	1901
40°	518	960	1787
45°	206	700	1684
50°	91	439	1531
55°	74	230	1341
60°	50	174	1068
65°	33	171	734
70°	33	156	342
75°	43	150	150
80°	64	179	179
85°	128	356	257

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1684 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.4	7.3
10°-20°	65.5	18.8
20°-30°	82.6	23.7
30°-40°	75.8	21.8
40°-50°	51.6	14.8
50°-60°	28.1	8.1
60°-70°	12.2	3.5
70°-80°	4.4	1.3
80°-90°	2.9	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°	173.5	49.8
0°-40°	249.3	71.5
0°-60°	329.1	94.4
0°-90°	348.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	348.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	277	277	277	277	277	
5°	266	270	270	273	275	25
15°	214	221	231	248	258	59
25°	147	158	175	203	224	67
35°	80	91	115	151	181	49
45°	17	28	58	102	138	16
55°	5	5	15	56	89	4
65°	2	2	8	18	36	2
75°	1	4	4	4	4	1
85°	1	3	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	276.6	276.6	276.6	276.6	276.6
2.5°	273.3	276.6	274.3	274.9	274.9
5°	266.2	269.7	270.1	273.0	275.3
7.5°	255.5	260.6	263.2	269.1	273.0
10°	242.5	248.6	253.8	263.9	269.1
12.5°	228.5	235.7	243.4	256.8	264.2
15°	213.6	221.0	231.4	248.0	258.1
17.5°	197.0	206.1	218.8	238.6	250.9
20°	181.1	190.2	204.8	227.2	242.5
22.5°	164.6	174.0	190.2	215.2	233.4
25°	147.4	157.8	175.3	203.2	223.6
27.5°	130.5	141.5	160.0	190.5	213.3
30°	113.6	124.6	144.8	177.6	202.5
32.5°	96.4	107.8	129.5	163.9	191.5
35°	79.5	91.2	114.6	150.9	180.8
37.5°	62.3	74.7	99.6	138.3	170.1
40°	46.1	58.4	85.4	125.6	159.0
42.5°	30.8	43.2	70.8	113.3	148.7
45°	16.9	28.2	57.5	101.9	138.3
47.5°	9.1	15.6	44.5	90.9	126.6
50°	6.8	8.4	32.8	79.2	114.3
52.5°	5.8	6.5	22.7	66.9	101.9
55°	4.9	5.2	15.3	56.2	89.3
57.5°	3.9	4.2	11.4	45.4	75.6
60°	2.9	3.6	10.1	35.1	62.0
62.5°	2.3	2.9	9.4	25.6	49.0
65°	1.6	2.3	8.4	17.5	36.0
67.5°	1.6	2.6	7.1	11.4	24.3
70°	1.3	3.6	6.2	7.5	13.6
72.5°	1.3	3.9	5.2	5.2	5.2
75°	1.3	4.2	4.5	4.5	4.5
77.5°	1.3	3.9	4.2	3.9	3.9
80°	1.3	3.6	3.6	3.6	3.6
82.5°	1.3	3.2	3.6	3.6	2.9
85°	1.3	2.9	3.6	3.6	2.6
87.5°	1.0	2.9	3.2	3.2	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)