

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: P1060428

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060428
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-S350D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

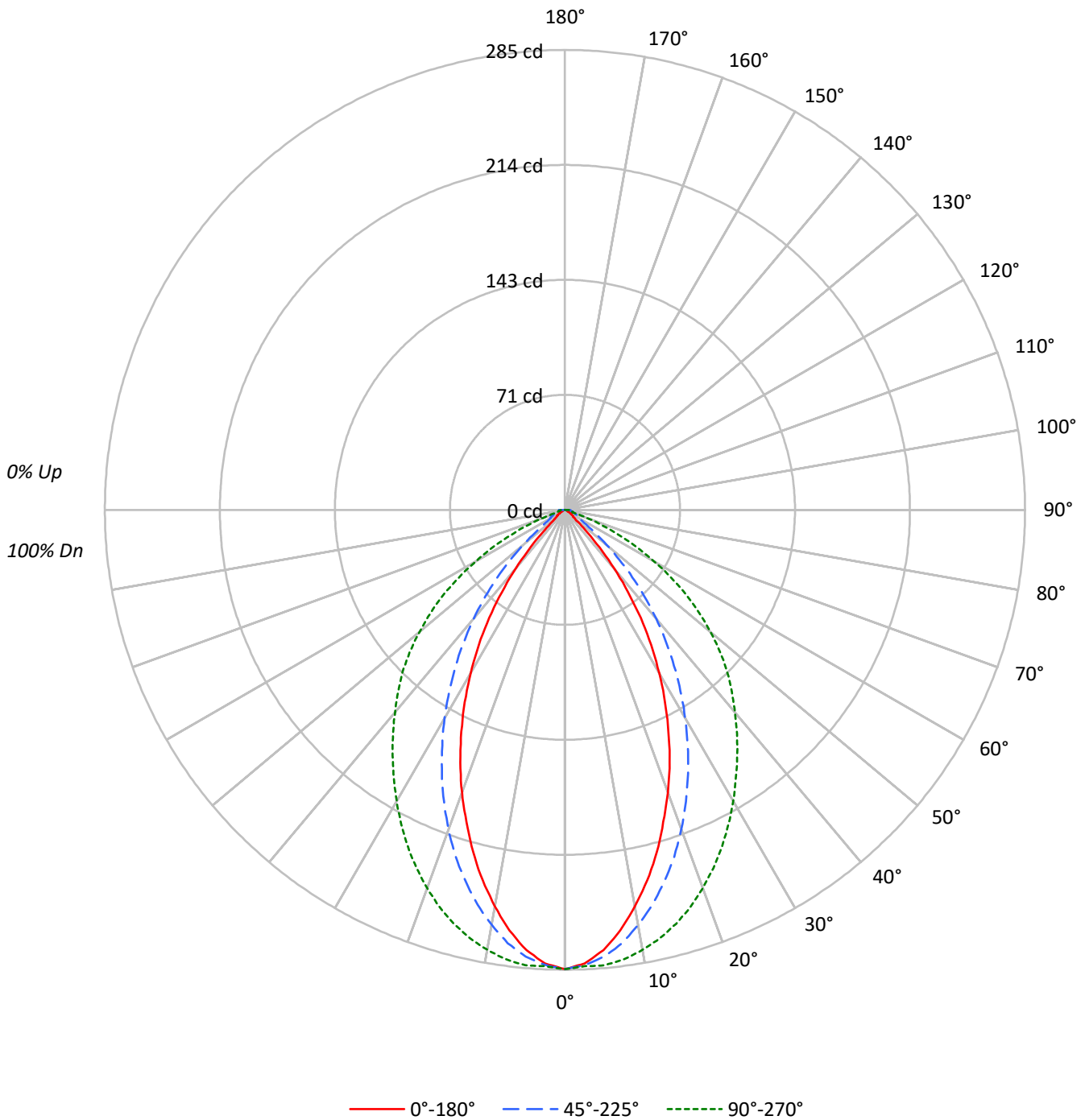
Lumens per Lamp: N/A
Luminaire Lumens: 358.7 lumens
Efficiency: N/A
Efficacy: 28.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	2451	2451	2451
5°	2368	2402	2449
10°	2182	2284	2421
15°	1959	2124	2368
20°	1708	1932	2286
25°	1441	1714	2187
30°	1162	1482	2073
35°	860	1239	1956
40°	533	988	1840
45°	212	720	1733
50°	94	451	1575
55°	75	236	1380
60°	52	179	1099
65°	35	177	756
70°	33	159	352
75°	43	156	156
80°	64	183	183
85°	128	366	267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1733 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.1	7.3
10°-20°	67.4	18.8
20°-30°	85.1	23.7
30°-40°	78.0	21.8
40°-50°	53.1	14.8
50°-60°	28.9	8.1
60°-70°	12.5	3.5
70°-80°	4.6	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°	178.6	49.8
0°-40°	256.6	71.5
0°-60°	338.7	94.4
0°-90°	358.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	358.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	285	285	285	285	285	
5°	274	278	278	281	283	25
15°	220	228	238	255	266	61
25°	152	162	180	209	230	69
35°	82	94	118	155	186	51
45°	17	29	59	105	142	16
55°	5	5	16	58	92	4
65°	2	2	9	18	37	2
75°	1	4	5	5	5	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°	284.6	284.6	284.6	284.6	284.6
2.5°	281.3	284.6	282.3	283.0	283.0
5°	273.9	277.6	277.9	280.9	283.3
7.5°	262.9	268.3	270.9	276.9	280.9
10°	249.5	255.9	261.2	271.6	276.9
12.5°	235.2	242.5	250.5	264.2	271.9
15°	219.8	227.5	238.2	255.2	265.6
17.5°	202.8	212.1	225.2	245.5	258.2
20°	186.4	195.8	210.8	233.8	249.5
22.5°	169.4	179.1	195.8	221.5	240.2
25°	151.7	162.4	180.4	209.1	230.2
27.5°	134.3	145.7	164.7	196.1	219.5
30°	116.9	128.3	149.0	182.7	208.5
32.5°	99.2	110.9	133.3	168.7	197.1
35°	81.8	93.9	117.9	155.3	186.1
37.5°	64.1	76.8	102.6	142.3	175.0
40°	47.4	60.1	87.9	129.3	163.7
42.5°	31.7	44.4	72.8	116.6	153.0
45°	17.4	29.1	59.1	104.9	142.3
47.5°	9.4	16.0	45.8	93.5	130.3
50°	7.0	8.7	33.7	81.5	117.6
52.5°	6.0	6.7	23.4	68.8	104.9
55°	5.0	5.3	15.7	57.8	91.9
57.5°	4.0	4.3	11.7	46.8	77.8
60°	3.0	3.7	10.4	36.1	63.8
62.5°	2.3	3.0	9.7	26.4	50.4
65°	1.7	2.3	8.7	18.0	37.1
67.5°	1.7	2.7	7.3	11.7	25.1
70°	1.3	3.7	6.3	7.7	14.0
72.5°	1.3	4.0	5.3	5.3	5.3
75°	1.3	4.3	4.7	4.7	4.7
77.5°	1.3	4.0	4.3	4.0	4.0
80°	1.3	3.7	3.7	3.7	3.7
82.5°	1.3	3.3	3.7	3.7	3.0
85°	1.3	3.0	3.7	3.7	2.7
87.5°	1.0	3.0	3.3	3.3	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)