

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: P1060381

Luminaire Tested: S124RDR-S350D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060381
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D830-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

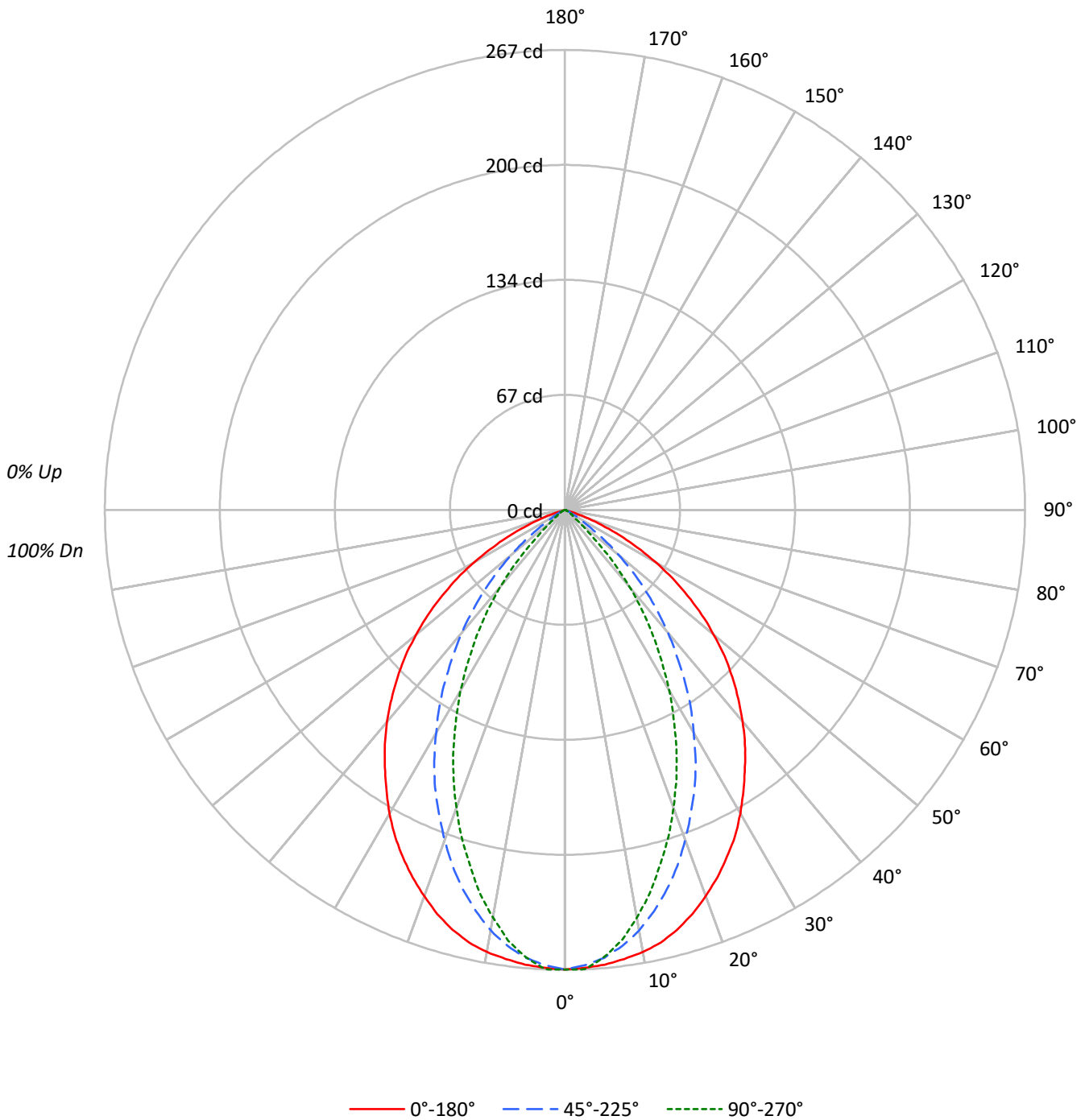
Lumens per Lamp: N/A
Luminaire Lumens: 348.5 lumens
Efficiency: N/A
Efficacy: 27.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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				
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91				
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55				
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2298	2298	2298
5°	2291	2257	2253
10°	2280	2169	2101
15°	2248	2035	1902
20°	2187	1869	1686
25°	2114	1693	1455
30°	2024	1485	1204
35°	1914	1273	937
40°	1804	1045	654
45°	1672	804	324
50°	1508	543	109
55°	1303	278	75
60°	1044	100	53
65°	715	55	24
70°	320	30	20
75°	0	13	13
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1672 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.7	7.1
10°-20°	64.6	18.5
20°-30°	83.6	24.0
30°-40°	79.5	22.8
40°-50°	56.3	16.1
50°-60°	28.9	8.3
60°-70°	10.1	2.9
70°-80°	0.9	0.3
80°-90°	0.0	0.0
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°	172.9	49.6
0°-40°	252.4	72.4
0°-60°	337.5	96.8
0°-90°	348.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	348.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	267	267	267	267	267	
5°	265	265	261	261	261	25
15°	252	244	228	218	213	71
25°	222	205	178	159	153	102
35°	182	155	121	98	89	114
45°	137	106	66	38	27	106
55°	87	57	18	5	5	78
65°	35	17	3	2	1	35
75°	0	0	0	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	266.9	266.9	266.9	266.9	266.9
2.5°	266.1	266.9	264.6	266.5	266.9
5°	265.0	265.4	261.1	261.1	260.7
7.5°	263.0	262.3	255.3	252.6	252.2
10°	260.7	258.0	248.0	242.2	240.3
12.5°	257.3	252.2	238.7	230.3	227.9
15°	252.2	244.5	228.3	217.5	213.3
17.5°	246.1	236.0	216.8	203.6	199.4
20°	238.7	226.0	204.0	189.4	184.0
22.5°	231.0	216.4	190.9	174.3	168.9
25°	222.5	205.2	178.2	159.3	153.1
27.5°	213.7	193.2	164.3	144.6	136.5
30°	203.6	181.3	149.3	128.8	121.1
32.5°	192.8	168.2	135.8	113.8	104.5
35°	182.1	155.4	121.1	97.6	89.1
37.5°	171.6	143.5	106.5	81.8	73.7
40°	160.5	130.4	93.0	67.5	58.2
42.5°	148.9	117.6	79.1	52.8	42.8
45°	137.3	105.7	66.0	37.8	26.6
47.5°	125.7	93.0	53.2	23.9	14.3
50°	112.6	80.6	40.5	12.7	8.1
52.5°	100.3	69.0	28.9	7.3	6.2
55°	86.8	57.1	18.5	5.4	5.0
57.5°	74.1	45.5	10.4	4.2	3.9
60°	60.6	35.1	5.8	3.5	3.1
62.5°	47.1	25.5	3.9	2.3	1.9
65°	35.1	17.0	2.7	1.5	1.2
67.5°	23.1	9.6	1.9	0.8	0.8
70°	12.7	4.6	1.2	0.8	0.8
72.5°	4.6	1.5	0.8	0.4	0.4
75°	0.0	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)