

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: P1060387

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060387
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D830-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

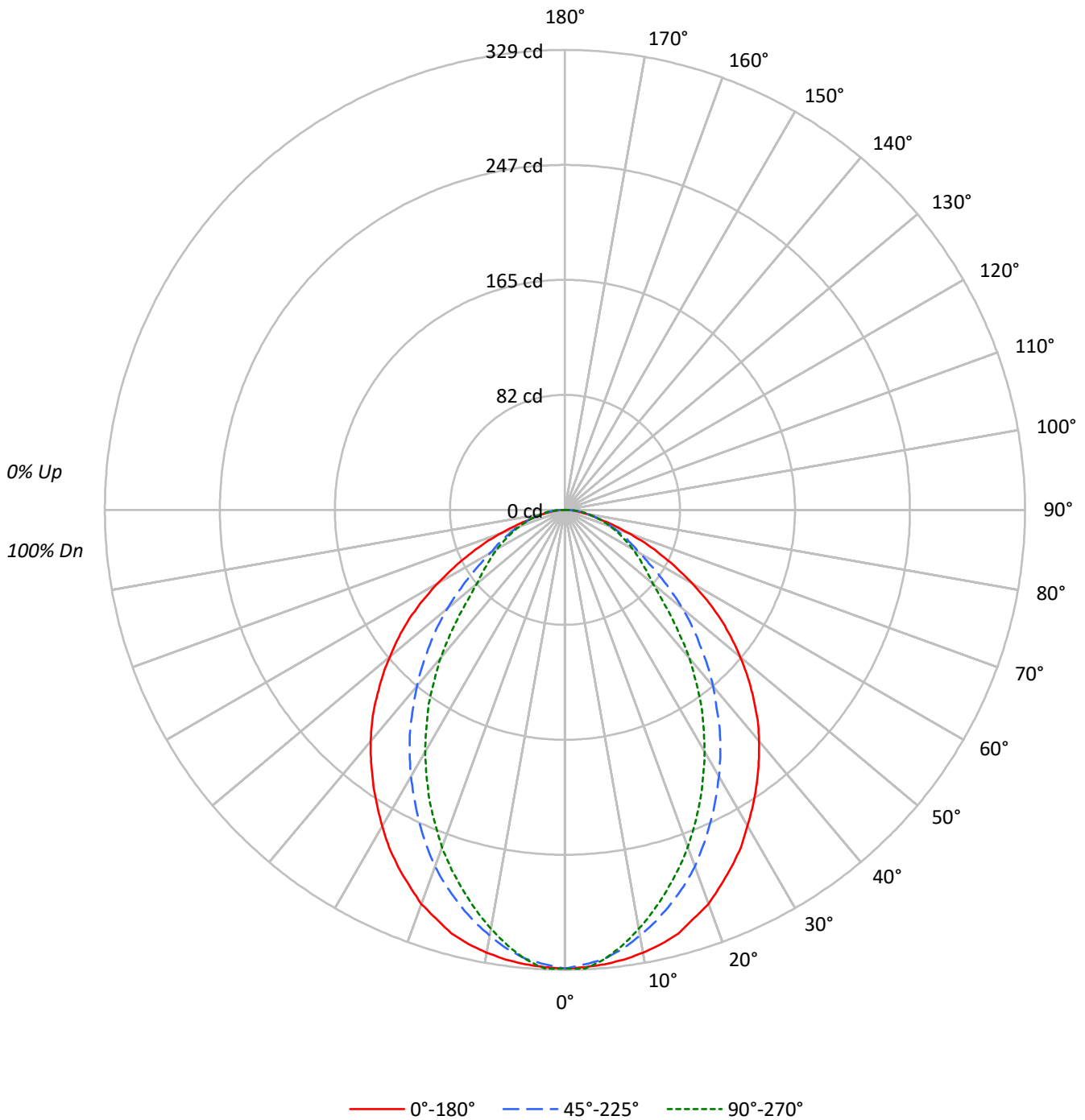
Lumens per Lamp: N/A
Luminaire Lumens: 632.9 lumens
Efficiency: N/A
Efficacy: 50.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74				
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2826	2826	2826
5°	2821	2787	2790
10°	2813	2705	2661
15°	2796	2603	2510
20°	2750	2488	2354
25°	2678	2342	2177
30°	2596	2190	1987
35°	2513	2031	1784
40°	2428	1851	1557
45°	2320	1662	1301
50°	2190	1467	1101
55°	2039	1245	1019
60°	1807	1056	963
65°	1540	974	911
70°	1203	904	864
75°	822	835	835
80°	709	784	803
85°	613	761	840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2320 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.5	4.8
10°-20°	82.9	13.1
20°-30°	115.1	18.2
30°-40°	123.4	19.5
40°-50°	109.3	17.3
50°-60°	82.4	13.0
60°-70°	53.3	8.4
70°-80°	27.4	4.3
80°-90°	8.4	1.3
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°	228.6	36.1
0°-40°	352.0	55.6
0°-60°	543.7	85.9
0°-90°	632.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	632.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	328	328	328	328	328	
5°	326	327	322	323	323	31
15°	314	307	292	285	282	88
25°	282	267	246	233	229	130
35°	239	218	193	176	170	150
45°	190	166	136	115	107	147
55°	136	113	83	70	68	121
65°	76	61	48	45	45	75
75°	25	26	25	25	25	29
85°	6	7	8	8	8	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	328.2	328.2	328.2	328.2	328.2
2.5°	327.5	328.6	325.5	327.8	328.6
5°	326.3	326.7	322.4	322.8	322.8
7.5°	324.4	323.6	316.7	314.7	314.3
10°	321.7	319.4	309.3	305.5	304.3
12.5°	318.2	314.0	301.2	295.8	293.5
15°	313.6	306.6	292.0	284.6	281.6
17.5°	306.6	297.8	282.3	273.1	269.6
20°	300.1	288.1	271.5	260.0	256.9
22.5°	290.8	278.1	259.2	246.8	243.0
25°	281.9	266.9	246.5	233.3	229.1
27.5°	272.3	255.3	233.3	219.5	214.1
30°	261.1	243.0	220.2	205.6	199.8
32.5°	250.3	231.0	206.7	190.5	184.4
35°	239.1	217.5	193.2	175.9	169.7
37.5°	227.6	204.8	178.2	161.2	153.1
40°	216.0	192.1	164.7	145.4	138.5
42.5°	204.0	179.0	150.8	130.8	121.9
45°	190.5	165.9	136.5	115.3	106.8
47.5°	177.4	153.1	123.4	100.3	92.6
50°	163.5	139.6	109.5	87.2	82.2
52.5°	149.7	125.7	96.0	77.1	74.8
55°	135.8	113.0	82.9	69.8	67.9
57.5°	120.3	99.9	71.4	63.3	61.7
60°	104.9	85.6	61.3	57.1	55.9
62.5°	89.9	73.3	54.4	50.9	50.1
65°	75.6	60.9	47.8	45.1	44.7
67.5°	61.7	50.1	41.7	40.1	39.3
70°	47.8	40.1	35.9	35.1	34.3
72.5°	35.5	32.4	30.5	30.1	29.7
75°	24.7	25.8	25.1	25.1	25.1
77.5°	19.7	20.1	20.4	20.8	20.4
80°	14.3	15.4	15.8	16.6	16.2
82.5°	10.0	10.8	12.0	12.3	12.7
85°	6.2	6.6	7.7	8.5	8.5
87.5°	2.7	3.1	3.9	4.6	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)