

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: P1060389

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060389  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)  
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-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

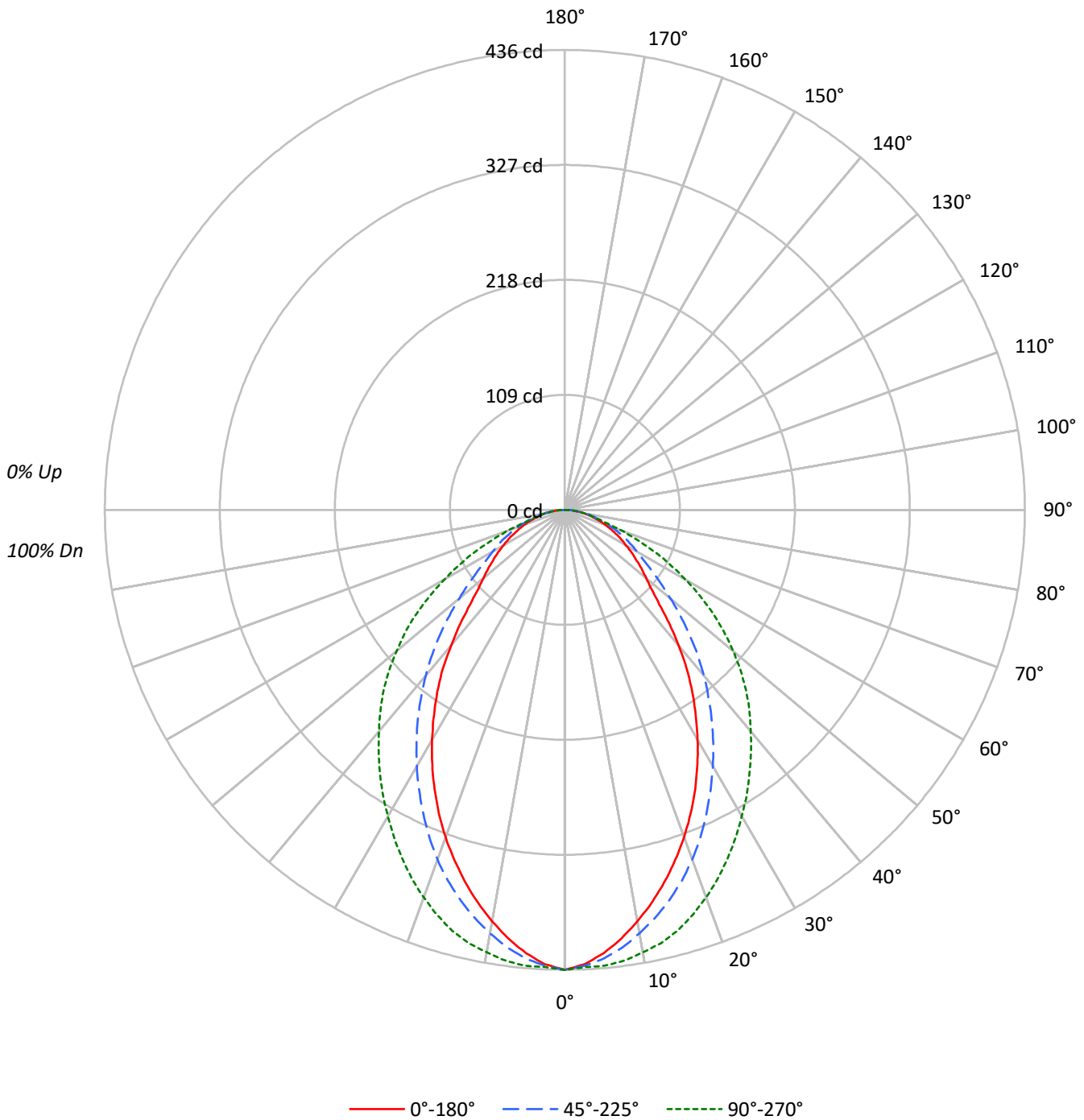
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 800.3 lumens  
Efficiency: N/A  
Efficacy: 64.0 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11  
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65				65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57				57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50				50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37				37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33				33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3755	3755	3755
5°	3647	3690	3750
10°	3463	3564	3726
15°	3255	3414	3682
20°	3028	3233	3583
25°	2776	3018	3465
30°	2502	2790	3335
35°	2215	2552	3209
40°	1883	2303	3080
45°	1542	2035	2962
50°	1349	1748	2786
55°	1240	1507	2579
60°	1150	1355	2273
65°	1078	1273	1903
70°	1010	1166	1428
75°	952	1065	1041
80°	883	977	883
85°	800	948	761

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2962 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.3	5.0
10°-20°	108.4	13.6
20°-30°	148.2	18.5
30°-40°	155.8	19.5
40°-50°	135.2	16.9
50°-60°	102.0	12.7
60°-70°	66.1	8.3
70°-80°	33.9	4.2
80°-90°	10.3	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°	297.0	37.1
0°-40°	452.8	56.6
0°-60°	690.0	86.2
0°-90°	800.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	422	428	427	430	434	39
15°	365	374	383	400	413	102
25°	292	303	318	342	365	134
35°	211	222	243	275	305	131
45°	127	139	167	209	243	100
55°	83	85	100	142	172	74
65°	53	54	62	76	93	53
75°	29	32	32	32	31	30
85°	8	10	10	9	8	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	436.1	436.1	436.1	436.1	436.1
2.5°	431.1	436.5	432.7	433.4	433.8
5°	421.9	427.6	426.9	430.3	433.8
7.5°	409.9	416.8	418.4	425.3	431.1
10°	396.0	403.7	407.6	418.8	426.1
12.5°	381.3	389.0	396.0	410.3	420.7
15°	365.1	374.0	382.9	400.2	413.0
17.5°	348.1	357.4	368.6	387.5	402.6
20°	330.4	339.6	352.8	373.2	391.0
22.5°	311.5	321.9	335.8	357.8	378.6
25°	292.2	302.6	317.6	342.0	364.7
27.5°	272.1	282.9	299.1	326.1	350.5
30°	251.6	263.2	280.6	309.2	335.4
32.5°	230.8	243.2	261.7	292.2	320.7
35°	210.7	222.3	242.8	275.2	305.3
37.5°	189.9	201.5	223.5	258.6	289.9
40°	167.5	180.2	204.9	241.2	274.0
42.5°	146.7	159.4	186.0	224.6	259.0
45°	126.6	138.6	167.1	208.8	243.2
47.5°	111.2	119.6	148.2	193.4	226.2
50°	100.7	104.6	130.5	176.4	208.0
52.5°	91.5	94.6	114.2	159.4	190.3
55°	82.6	84.9	100.4	142.4	171.8
57.5°	74.9	76.0	88.0	125.4	151.7
60°	66.8	68.3	78.7	108.1	132.0
62.5°	60.2	61.0	70.6	91.5	112.3
65°	52.9	54.0	62.5	75.6	93.4
67.5°	46.3	48.2	54.0	61.8	73.7
70°	40.1	42.8	46.3	50.2	56.7
72.5°	34.4	37.4	39.4	40.9	39.8
75°	28.6	32.0	32.0	32.4	31.3
77.5°	23.2	26.2	25.9	25.5	23.9
80°	17.8	20.5	19.7	19.3	17.8
82.5°	13.1	15.1	14.3	13.9	12.0
85°	8.1	10.0	9.6	9.3	7.7
87.5°	3.9	5.8	5.4	5.0	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)