

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: P1060443

Luminaire Tested: S124RDR-S350D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060443  
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-S350D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

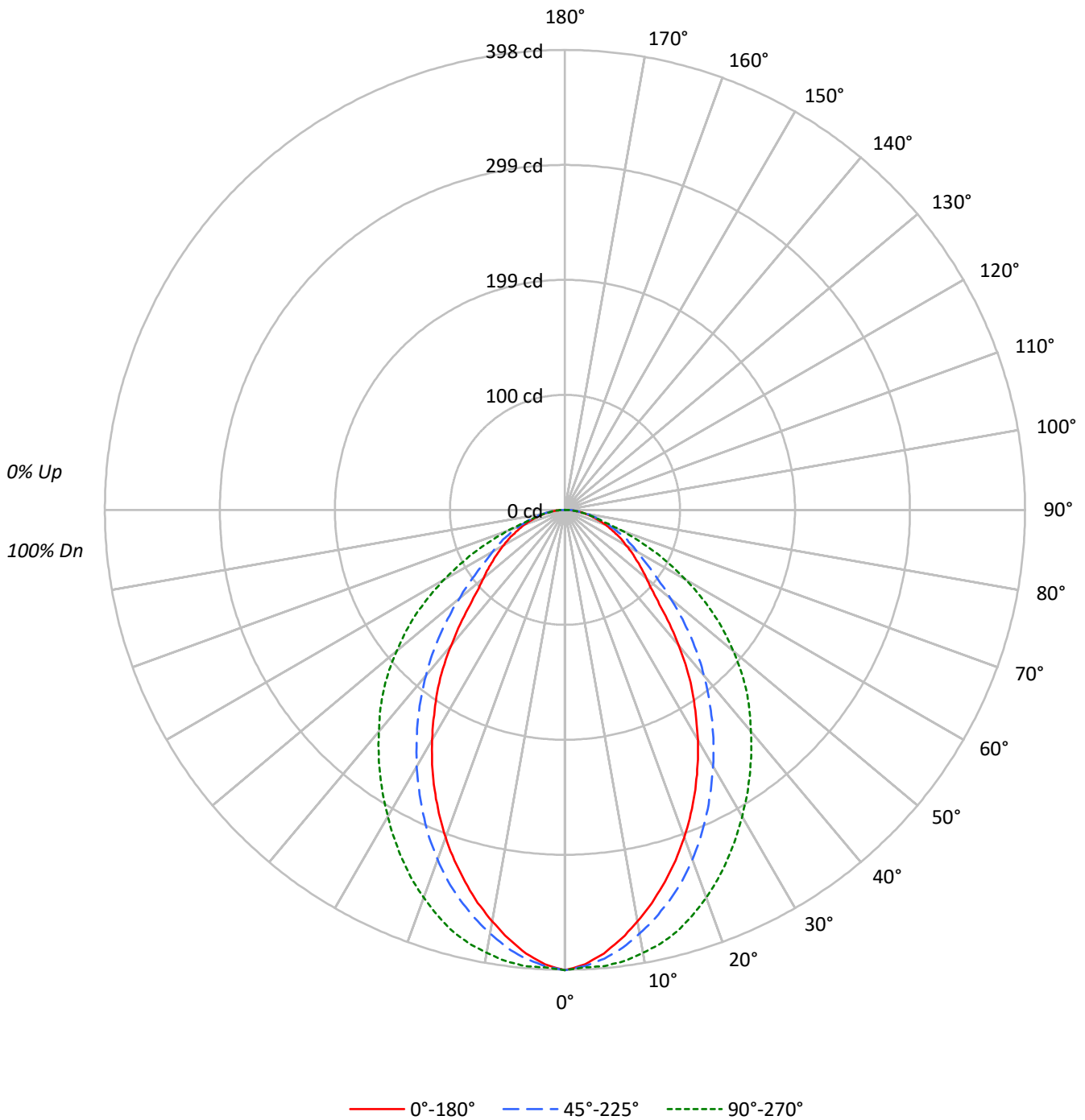
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 731.1 lumens  
Efficiency: N/A  
Efficacy: 58.5 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				
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65				
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57				
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50				
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37				
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				

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

	0°	45°	90°
0°	3431	3431	3431
5°	3331	3370	3426
10°	3163	3255	3403
15°	2973	3118	3363
20°	2766	2953	3273
25°	2536	2757	3166
30°	2286	2548	3047
35°	2024	2332	2932
40°	1720	2104	2814
45°	1408	1860	2705
50°	1232	1597	2545
55°	1132	1377	2356
60°	1051	1238	2077
65°	984	1163	1738
70°	924	1065	1304
75°	868	975	952
80°	803	893	803
85°	731	869	701

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2705 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.8	5.0
10°-20°	99.1	13.6
20°-30°	135.4	18.5
30°-40°	142.3	19.5
40°-50°	123.5	16.9
50°-60°	93.2	12.7
60°-70°	60.4	8.3
70°-80°	31.0	4.2
80°-90°	9.4	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°	271.3	37.1
0°-40°	413.6	56.6
0°-60°	630.3	86.2
0°-90°	731.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	731.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	385	391	390	393	396	36
15°	334	342	350	366	377	93
25°	267	276	290	312	333	122
35°	192	203	222	251	279	120
45°	116	127	153	191	222	91
55°	75	78	92	130	157	68
65°	48	49	57	69	85	48
75°	26	29	29	30	29	28
85°	7	9	9	8	7	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	398.4	398.4	398.4	398.4	398.4
2.5°	393.8	398.8	395.2	395.9	396.3
5°	385.4	390.6	389.9	393.1	396.3
7.5°	374.4	380.8	382.2	388.5	393.8
10°	361.7	368.8	372.3	382.5	389.2
12.5°	348.3	355.4	361.7	374.8	384.3
15°	333.5	341.6	349.7	365.6	377.2
17.5°	318.0	326.5	336.7	354.0	367.7
20°	301.8	310.3	322.2	340.9	357.2
22.5°	284.5	294.0	306.7	326.8	345.9
25°	266.9	276.4	290.2	312.4	333.2
27.5°	248.6	258.4	273.2	297.9	320.1
30°	229.9	240.5	256.3	282.4	306.4
32.5°	210.8	222.1	239.0	266.9	293.0
35°	192.5	203.1	221.8	251.4	278.9
37.5°	173.5	184.0	204.1	236.2	264.8
40°	153.0	164.7	187.2	220.4	250.3
42.5°	134.0	145.6	169.9	205.2	236.6
45°	115.6	126.6	152.7	190.7	222.1
47.5°	101.5	109.3	135.4	176.6	206.6
50°	92.0	95.5	119.2	161.1	190.0
52.5°	83.6	86.4	104.4	145.6	173.8
55°	75.4	77.6	91.7	130.1	156.9
57.5°	68.4	69.5	80.4	114.6	138.6
60°	61.0	62.4	71.9	98.7	120.6
62.5°	55.0	55.7	64.5	83.6	102.6
65°	48.3	49.4	57.1	69.1	85.3
67.5°	42.3	44.1	49.4	56.4	67.3
70°	36.7	39.1	42.3	45.8	51.8
72.5°	31.4	34.2	36.0	37.4	36.3
75°	26.1	29.3	29.3	29.6	28.6
77.5°	21.2	24.0	23.6	23.3	21.9
80°	16.2	18.7	18.0	17.6	16.2
82.5°	12.0	13.8	13.0	12.7	10.9
85°	7.4	9.2	8.8	8.5	7.1
87.5°	3.5	5.3	4.9	4.6	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)