

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: P1060434

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060434
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-S350D930-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, 90 CRI LEDS
Ballast/Driver: -

Summary

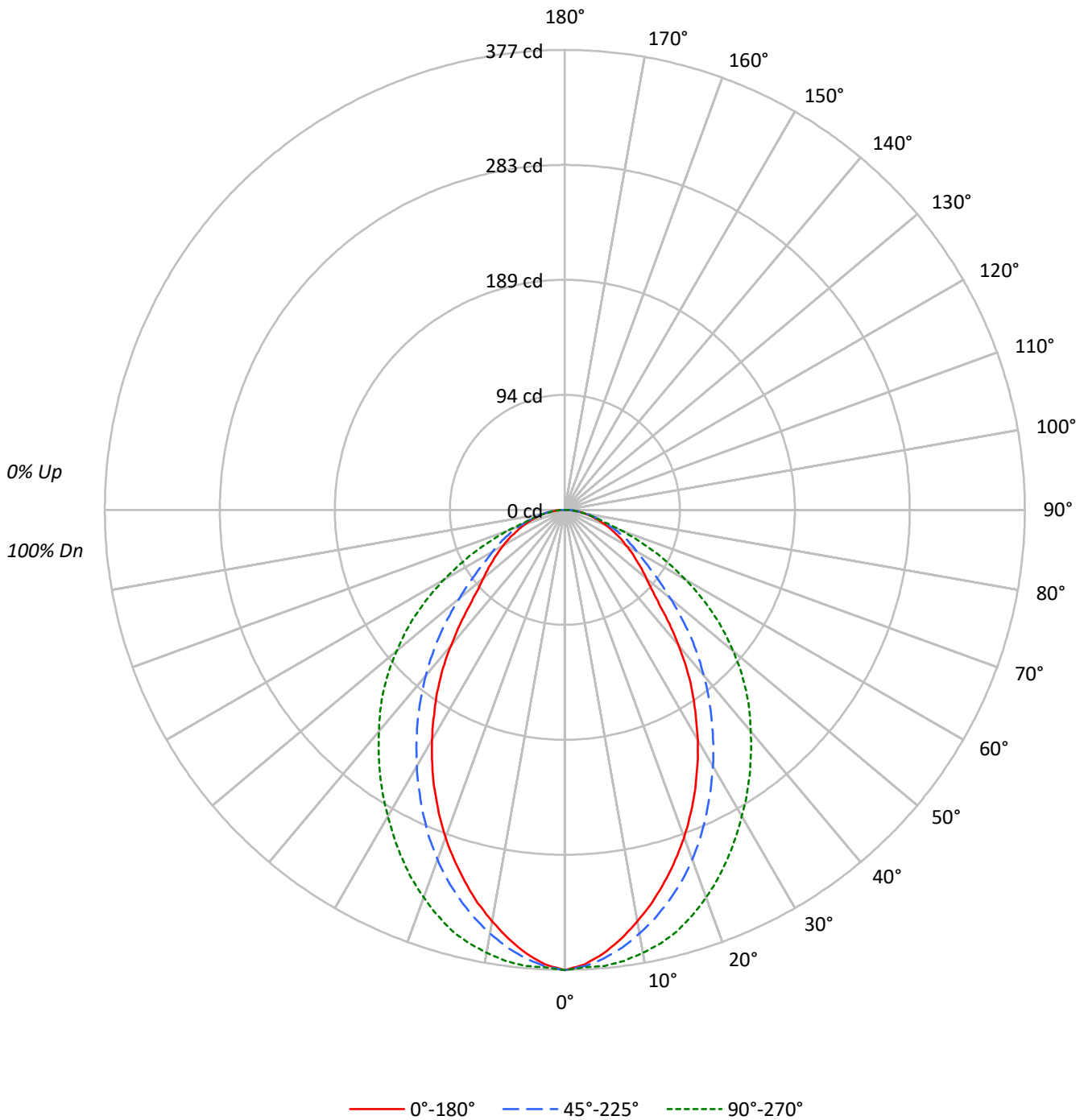
Lumens per Lamp: N/A
Luminaire Lumens: 692.2 lumens
Efficiency: N/A
Efficacy: 55.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	3249	3249	3249
5°	3154	3191	3244
10°	2995	3083	3223
15°	2815	2953	3184
20°	2619	2796	3099
25°	2401	2611	2998
30°	2165	2413	2885
35°	1916	2208	2776
40°	1629	1993	2664
45°	1333	1761	2561
50°	1167	1511	2410
55°	1072	1303	2231
60°	995	1173	1967
65°	931	1102	1646
70°	874	1010	1236
75°	822	922	898
80°	764	843	764
85°	692	820	662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2561 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	5.0
10°-20°	93.8	13.6
20°-30°	128.2	18.5
30°-40°	134.8	19.5
40°-50°	117.0	16.9
50°-60°	88.2	12.7
60°-70°	57.2	8.3
70°-80°	29.4	4.2
80°-90°	8.9	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°	256.9	37.1
0°-40°	391.7	56.6
0°-60°	596.8	86.2
0°-90°	692.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	692.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	377	377	377	377	377	
5°	365	370	369	372	375	34
15°	316	324	331	346	357	89
25°	253	262	275	296	316	116
35°	182	192	210	238	264	113
45°	110	120	145	181	210	86
55°	71	73	87	123	149	64
65°	46	47	54	65	81	46
75°	25	28	28	28	27	26
85°	7	9	8	8	7	8
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	377.3	377.3	377.3	377.3	377.3
2.5°	372.9	377.6	374.3	374.9	375.3
5°	364.9	369.9	369.2	372.2	375.3
7.5°	354.6	360.6	361.9	367.9	372.9
10°	342.5	349.2	352.6	362.2	368.6
12.5°	329.9	336.5	342.5	354.9	363.9
15°	315.8	323.5	331.2	346.2	357.2
17.5°	301.1	309.2	318.8	335.2	348.2
20°	285.8	293.8	305.1	322.8	338.2
22.5°	269.4	278.4	290.5	309.5	327.5
25°	252.7	261.7	274.8	295.8	315.5
27.5°	235.4	244.7	258.7	282.1	303.1
30°	217.7	227.7	242.7	267.4	290.1
32.5°	199.6	210.3	226.4	252.7	277.4
35°	182.3	192.3	210.0	238.0	264.1
37.5°	164.3	174.3	193.3	223.7	250.7
40°	144.9	155.9	177.3	208.7	237.0
42.5°	126.9	137.9	160.9	194.3	224.0
45°	109.5	119.9	144.6	180.6	210.3
47.5°	96.2	103.5	128.2	167.3	195.6
50°	87.1	90.5	112.8	152.6	179.9
52.5°	79.1	81.8	98.8	137.9	164.6
55°	71.4	73.4	86.8	123.2	148.6
57.5°	64.8	65.8	76.1	108.5	131.2
60°	57.8	59.1	68.1	93.5	114.2
62.5°	52.1	52.7	61.1	79.1	97.2
65°	45.7	46.7	54.1	65.4	80.8
67.5°	40.1	41.7	46.7	53.4	63.8
70°	34.7	37.1	40.1	43.4	49.1
72.5°	29.7	32.4	34.1	35.4	34.4
75°	24.7	27.7	27.7	28.0	27.0
77.5°	20.0	22.7	22.4	22.0	20.7
80°	15.4	17.7	17.0	16.7	15.4
82.5°	11.4	13.0	12.4	12.0	10.3
85°	7.0	8.7	8.3	8.0	6.7
87.5°	3.3	5.0	4.7	4.3	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)