

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: P1060413

Luminaire Tested: S124RDR-S350D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060413
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D850-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

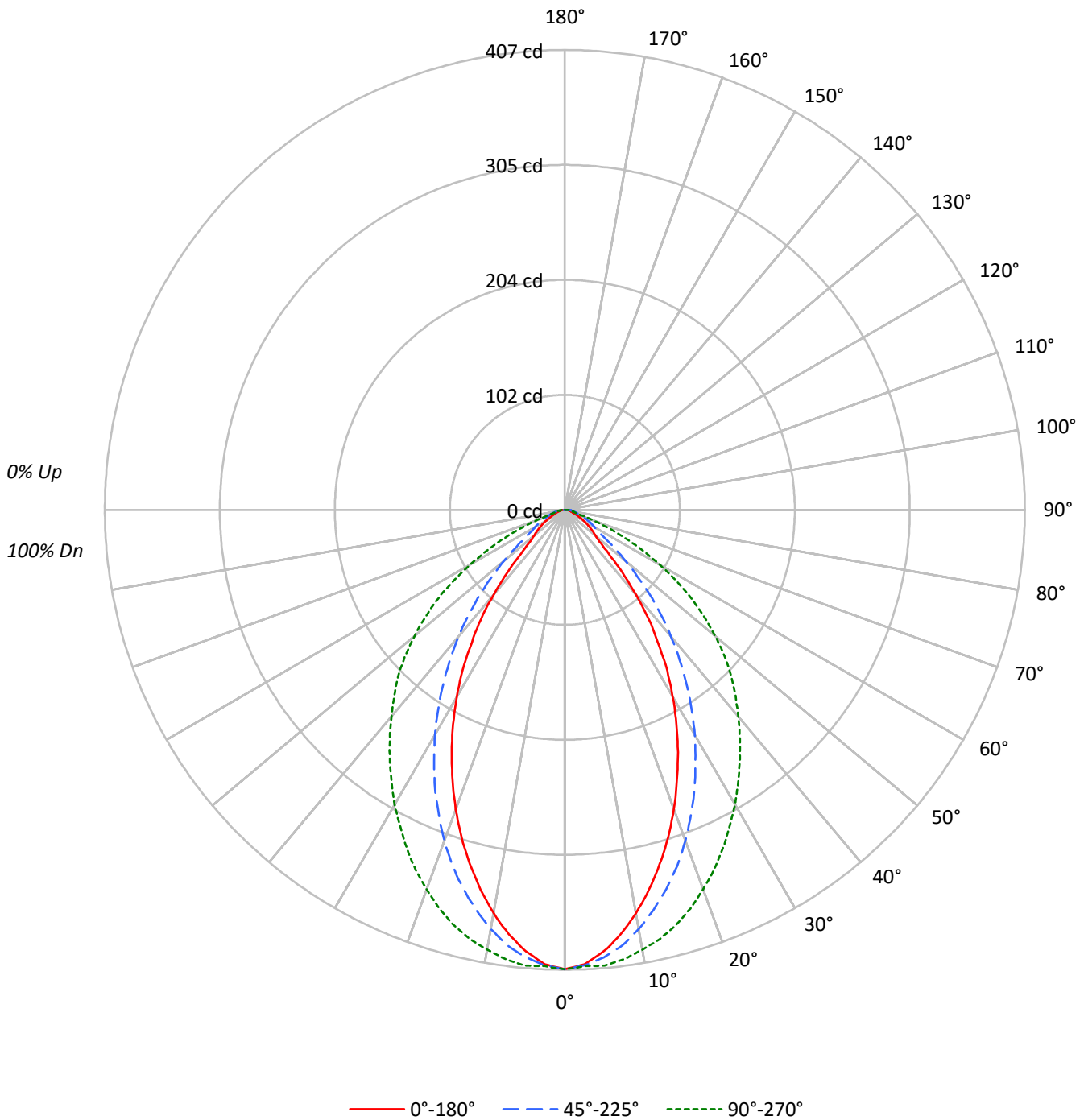
Lumens per Lamp: N/A
Luminaire Lumens: 575.5 lumens
Efficiency: N/A
Efficacy: 46.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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										
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	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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89															
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79															
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70					70															
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63					63															
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57					57															
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51					51															
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47					47															
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43					43															
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39															
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36					36															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3501	3501	3501
5°	3393	3436	3499
10°	3170	3293	3456
15°	2892	3094	3390
20°	2585	2856	3276
25°	2249	2582	3142
30°	1897	2286	2995
35°	1510	1968	2837
40°	1098	1639	2681
45°	664	1295	2539
50°	474	938	2324
55°	402	635	2052
60°	329	517	1659
65°	259	463	1194
70°	217	388	629
75°	196	363	316
80°	203	362	317
85°	267	543	356

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2539 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.4	6.5
10°-20°	98.1	17.0
20°-30°	127.2	22.1
30°-40°	122.5	21.3
40°-50°	91.1	15.8
50°-60°	56.0	9.7
60°-70°	27.5	4.8
70°-80°	10.7	1.9
80°-90°	4.9	0.9
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°	262.7	45.7
0°-40°	385.2	66.9
0°-60°	532.4	92.5
0°-90°	575.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	575.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	407	407	407	407	407	
5°	392	398	398	401	405	37
15°	324	335	347	368	380	91
25°	237	249	272	306	331	108
35°	144	157	187	234	270	90
45°	54	68	106	164	208	45
55°	27	28	42	96	137	24
65°	13	14	23	36	59	13
75°	6	10	11	10	10	6
85°	3	5	6	6	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	406.6	406.6	406.6	406.6	406.6
2.5°	402.5	407.1	403.4	403.9	404.3
5°	392.5	398.4	397.5	401.1	404.8
7.5°	378.9	385.7	388.9	396.2	401.1
10°	362.5	370.3	376.6	388.4	395.2
12.5°	344.4	353.4	362.5	378.4	388.9
15°	324.4	334.8	347.1	368.0	380.3
17.5°	303.9	314.4	330.3	354.4	369.8
20°	282.1	293.5	311.7	338.5	357.5
22.5°	259.4	271.7	291.7	322.1	344.8
25°	236.7	249.4	271.7	305.7	330.7
27.5°	214.0	226.2	250.3	288.5	315.7
30°	190.8	203.5	229.9	269.9	301.2
32.5°	168.5	180.4	208.5	252.1	285.3
35°	143.6	157.2	187.2	234.0	269.9
37.5°	122.2	134.5	166.7	215.8	254.4
40°	97.7	111.3	145.8	198.1	238.5
42.5°	75.0	88.6	125.8	180.4	223.5
45°	54.5	67.7	106.3	164.0	208.5
47.5°	41.3	49.1	87.2	148.1	191.7
50°	35.4	37.7	70.0	130.8	173.5
52.5°	31.3	32.3	54.5	113.6	155.4
55°	26.8	27.7	42.3	96.3	136.7
57.5°	22.7	23.2	34.1	80.0	116.8
60°	19.1	19.5	30.0	64.1	96.3
62.5°	15.9	16.4	26.8	49.5	76.8
65°	12.7	13.6	22.7	36.3	58.6
67.5°	10.4	12.3	19.1	25.4	40.9
70°	8.6	11.8	15.4	17.7	25.0
72.5°	7.3	10.9	13.2	12.7	12.3
75°	5.9	10.4	10.9	10.0	9.5
77.5°	5.0	9.1	9.1	8.2	7.7
80°	4.1	7.3	7.3	7.3	6.4
82.5°	3.6	5.9	6.4	6.4	5.0
85°	2.7	5.0	5.5	5.5	3.6
87.5°	1.8	4.5	5.0	4.5	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)