

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: P1060412

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
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-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

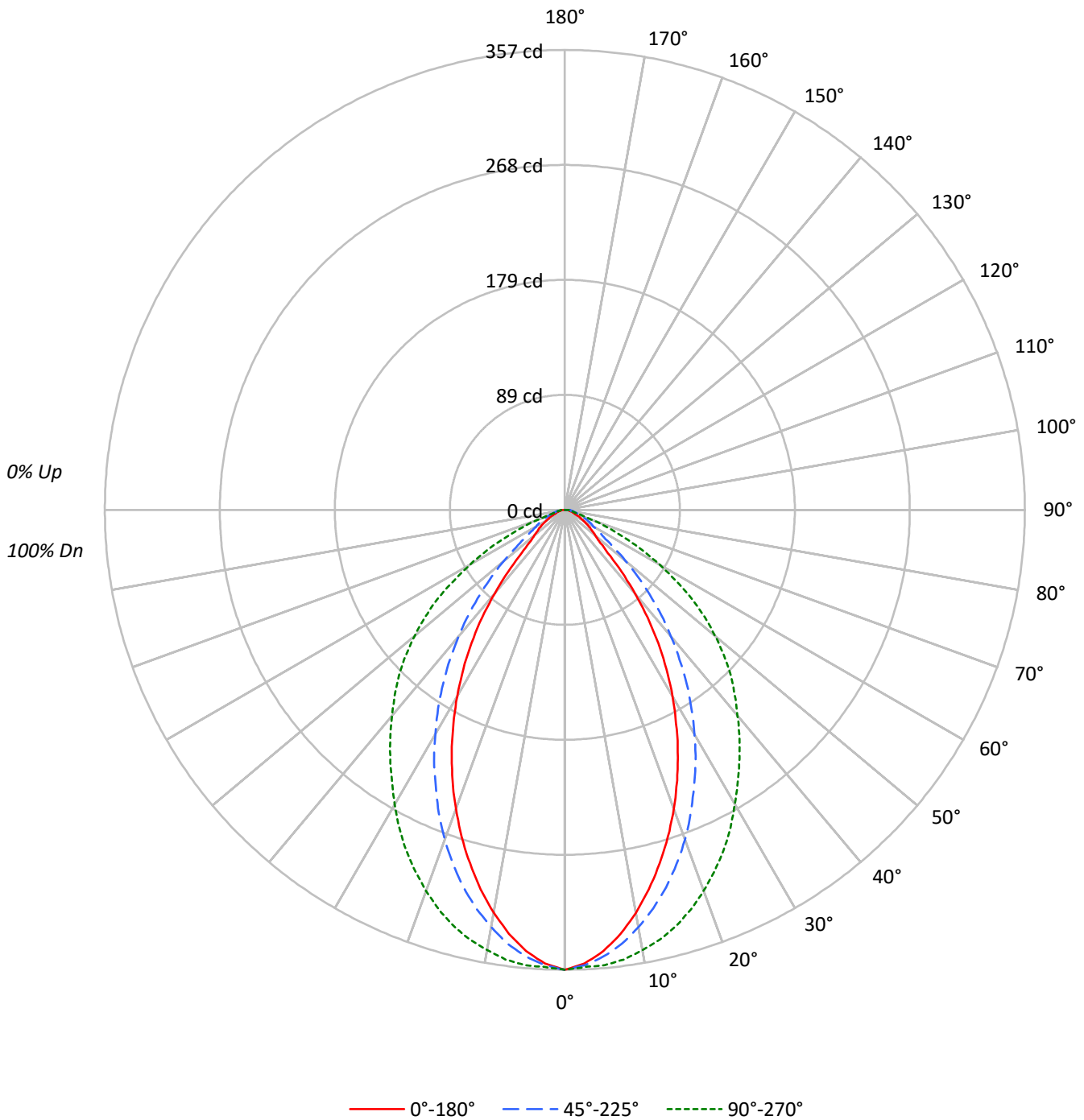
Lumens per Lamp: N/A
Luminaire Lumens: 502.0 lumens
Efficiency: N/A
Efficacy: 40.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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				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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3074	3074	3074
5°	2972	3007	3066
10°	2776	2876	3034
15°	2535	2705	2980
20°	2264	2497	2885
25°	1972	2253	2771
30°	1663	2001	2624
35°	1328	1733	2483
40°	954	1440	2344
45°	575	1134	2218
50°	414	821	2039
55°	348	552	1808
60°	282	437	1455
65°	222	397	1045
70°	194	332	561
75°	183	303	273
80°	179	317	248
85°	267	445	316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2218 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.8	6.5
10°-20°	85.9	17.1
20°-30°	111.4	22.2
30°-40°	107.1	21.3
40°-50°	79.5	15.8
50°-60°	48.7	9.7
60°-70°	23.6	4.7
70°-80°	9.0	1.8
80°-90°	4.0	0.8
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°	230.1	45.8
0°-40°	337.2	67.2
0°-60°	465.3	92.7
0°-90°	502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	502.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	357	357	357	357	357	
5°	344	349	348	351	355	32
15°	284	292	303	322	334	79
25°	208	218	237	268	292	95
35°	126	138	165	204	236	78
45°	47	59	93	142	182	39
55°	23	24	37	83	120	21
65°	11	12	20	31	51	11
75°	6	9	9	8	8	6
85°	3	4	4	4	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	357.0	357.0	357.0	357.0	357.0
2.5°	352.5	356.6	353.8	354.7	355.2
5°	343.8	348.8	347.9	351.1	354.7
7.5°	332.0	337.9	339.8	346.1	352.0
10°	317.5	324.8	328.9	339.3	347.0
12.5°	301.6	309.3	317.0	331.1	341.6
15°	284.3	292.5	303.4	321.6	334.3
17.5°	266.2	275.3	288.4	310.2	325.2
20°	247.1	256.6	272.5	296.6	314.8
22.5°	227.6	237.6	255.3	282.1	303.4
25°	207.6	218.0	237.1	267.5	291.6
27.5°	187.1	198.0	219.8	252.1	278.4
30°	167.2	177.6	201.2	236.2	263.9
32.5°	146.7	157.6	183.0	219.8	249.8
35°	126.3	137.6	164.9	203.9	236.2
37.5°	105.4	117.6	146.3	188.5	222.6
40°	84.9	96.7	128.1	172.6	208.5
42.5°	65.0	77.7	110.8	156.7	195.3
45°	47.2	59.0	93.1	142.2	182.1
47.5°	35.4	42.7	76.8	128.5	167.6
50°	30.9	32.2	61.3	113.6	152.2
52.5°	26.8	27.7	47.7	97.2	136.7
55°	23.2	24.1	36.8	83.1	120.4
57.5°	19.5	20.4	29.5	69.5	101.7
60°	16.4	17.3	25.4	55.4	84.5
62.5°	13.6	14.1	22.7	42.2	67.7
65°	10.9	11.8	19.5	30.9	51.3
67.5°	9.1	10.0	15.9	21.3	35.9
70°	7.7	10.0	13.2	15.0	22.3
72.5°	6.4	9.1	10.9	10.4	10.4
75°	5.5	8.6	9.1	8.2	8.2
77.5°	4.5	7.7	7.3	6.8	6.4
80°	3.6	6.4	6.4	5.5	5.0
82.5°	3.2	5.0	5.0	5.0	4.1
85°	2.7	4.5	4.5	4.1	3.2
87.5°	1.8	3.6	4.1	3.6	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)