

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: P1060391

Luminaire Tested: S124RDR-S350D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060391
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D835-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

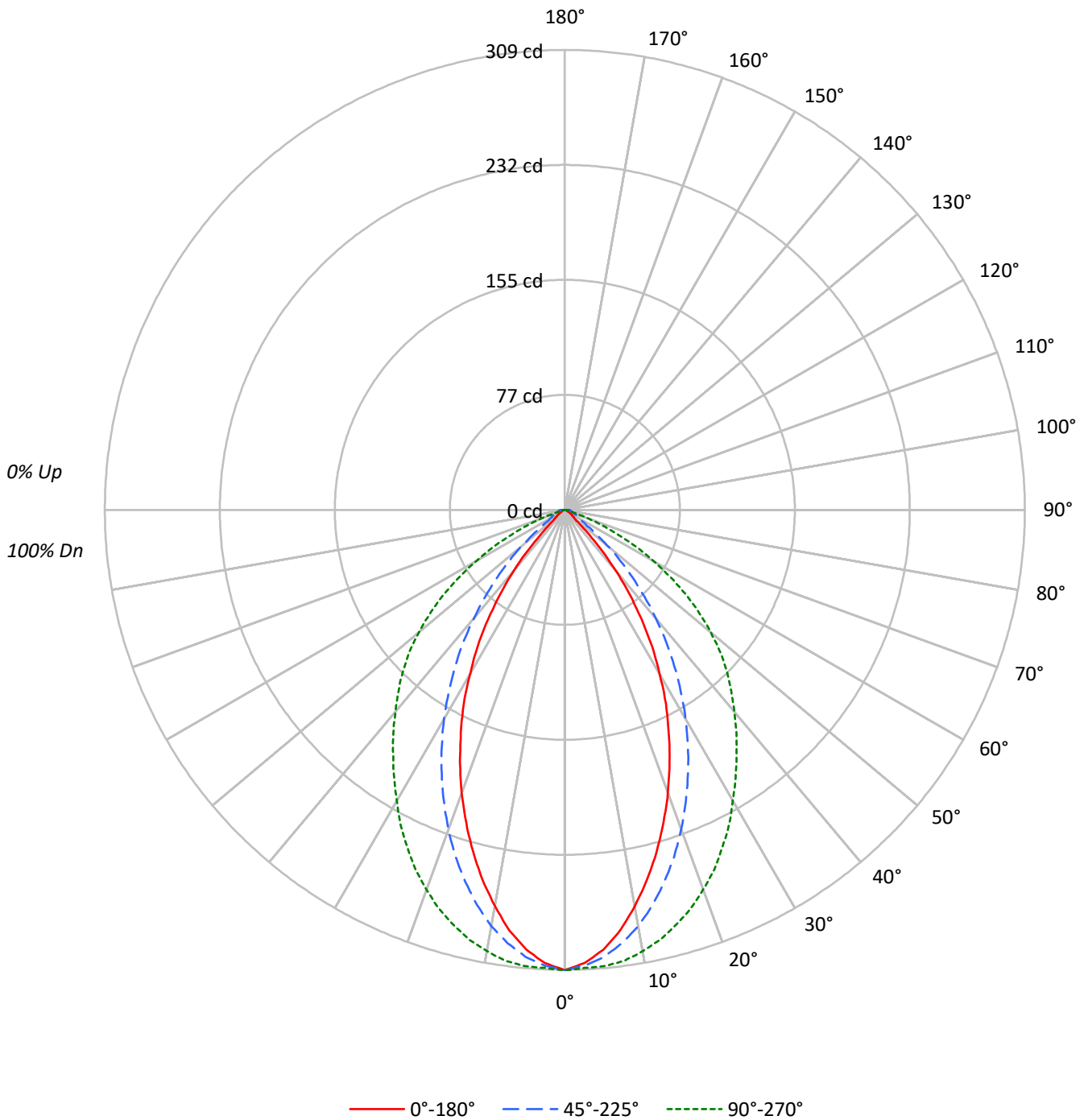
Lumens per Lamp: N/A
Luminaire Lumens: 388.2 lumens
Efficiency: N/A
Efficacy: 31.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060391

CATALOG NUMBER: S124RDR-S350D835-X4F0-XX-UDD-BVL-S

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2663	2663	2663
5°	2564	2606	2660
10°	2364	2482	2633
15°	2122	2305	2575
20°	1855	2095	2489
25°	1569	1860	2378
30°	1267	1613	2244
35°	943	1348	2114
40°	599	1068	1990
45°	240	783	1875
50°	104	500	1712
55°	80	258	1494
60°	57	176	1185
65°	41	175	809
70°	40	154	370
75°	53	163	150
80°	79	183	164
85°	158	326	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1875 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.3	7.3
10°-20°	73.0	18.8
20°-30°	92.2	23.8
30°-40°	84.7	21.8
40°-50°	57.8	14.9
50°-60°	31.3	8.1
60°-70°	13.3	3.4
70°-80°	4.6	1.2
80°-90°	2.9	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°	193.6	49.9
0°-40°	278.3	71.7
0°-60°	367.4	94.6
0°-90°	388.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	388.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	309	309	309	309	309	
5°	297	301	302	304	308	27
15°	238	246	258	277	289	66
25°	165	176	196	226	250	75
35°	90	102	128	168	201	56
45°	20	32	64	114	154	18
55°	5	6	17	63	100	5
65°	2	2	9	20	40	2
75°	2	4	5	4	4	2
85°	2	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	309.3	309.3	309.3	309.3	309.3
2.5°	304.8	308.5	306.4	307.2	308.1
5°	296.6	301.1	301.5	304.0	307.7
7.5°	285.1	290.4	293.7	299.9	305.6
10°	270.4	276.9	283.9	293.7	301.1
12.5°	254.8	261.8	272.0	285.9	295.8
15°	238.0	245.8	258.5	276.9	288.8
17.5°	220.4	229.0	244.2	265.9	281.0
20°	202.4	211.8	228.6	253.2	271.6
22.5°	183.9	193.8	212.2	240.1	261.8
25°	165.1	175.7	195.8	226.1	250.3
27.5°	147.1	156.9	179.0	212.2	238.8
30°	127.4	138.5	162.2	197.9	225.7
32.5°	109.4	120.0	145.0	183.1	213.4
35°	89.7	101.6	128.2	168.4	201.1
37.5°	71.3	82.8	111.8	154.4	189.3
40°	53.3	65.1	95.0	140.5	177.0
42.5°	35.6	48.3	79.1	126.2	165.5
45°	19.7	31.5	64.3	113.9	154.0
47.5°	10.2	17.2	50.4	101.6	141.7
50°	7.8	9.4	37.3	88.1	127.8
52.5°	6.6	7.0	25.4	74.6	113.9
55°	5.3	5.7	17.2	62.7	99.5
57.5°	4.1	4.5	12.3	51.2	83.6
60°	3.3	3.7	10.2	39.3	68.8
62.5°	2.5	2.9	9.8	29.1	54.1
65°	2.0	2.5	8.6	19.7	39.7
67.5°	1.6	2.5	7.4	12.7	26.6
70°	1.6	3.3	6.1	8.2	14.7
72.5°	1.6	3.7	5.3	5.3	5.3
75°	1.6	4.5	4.9	4.5	4.5
77.5°	1.6	4.1	4.1	4.1	4.1
80°	1.6	3.7	3.7	3.7	3.3
82.5°	1.6	3.3	3.7	3.7	2.9
85°	1.6	3.3	3.3	3.3	2.5
87.5°	1.2	3.3	3.3	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)