

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: P1060472

Luminaire Tested: S124RDR-S575D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060472
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-S575D835-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

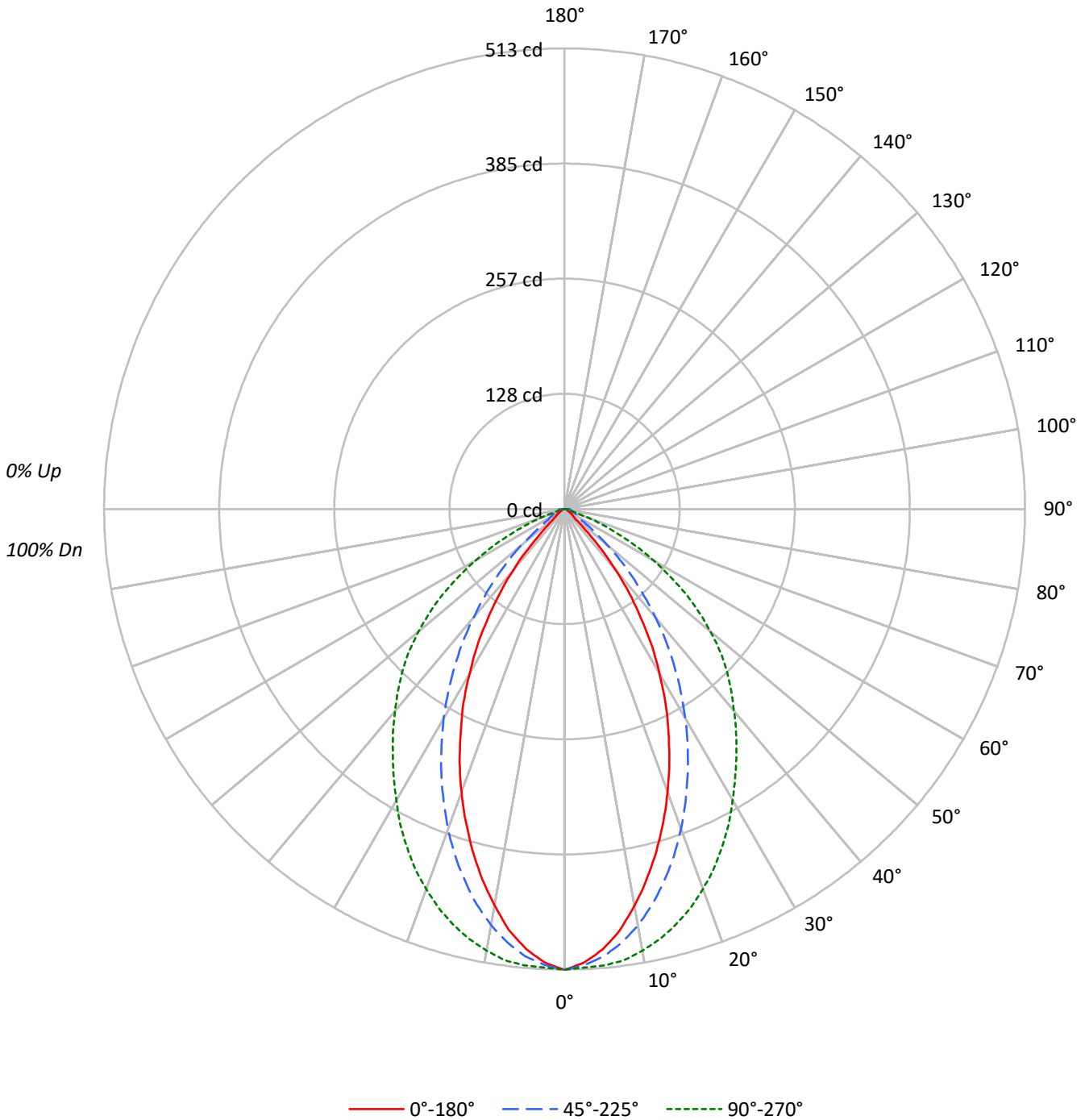
Lumens per Lamp: N/A
Luminaire Lumens: 644.0 lumens
Efficiency: N/A
Efficacy: 32.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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: P1060472

CATALOG NUMBER: S124RDR-S575D835-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1060472

CATALOG NUMBER: S124RDR-S575D835-X4F0-XX-UDD-BVL-S

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	103	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	88	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°	4419	4419	4419
5°	4254	4324	4412
10°	3923	4118	4368
15°	3520	3824	4272
20°	3077	3476	4129
25°	2602	3087	3946
30°	2102	2676	3724
35°	1564	2236	3508
40°	994	1773	3300
45°	397	1299	3113
50°	173	829	2841
55°	132	428	2480
60°	93	293	1967
65°	69	291	1343
70°	68	257	617
75°	90	273	250
80°	134	302	268
85°	267	534	405

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3113 cd/sqm



TEST NUMBER: P1060472

CATALOG NUMBER: S124RDR-S575D835-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.0	7.3
10°-20°	121.2	18.8
20°-30°	153.0	23.8
30°-40°	140.6	21.8
40°-50°	95.8	14.9
50°-60°	52.0	8.1
60°-70°	22.1	3.4
70°-80°	7.6	1.2
80°-90°	4.8	0.7
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°	321.2	49.9
0°-40°	461.7	71.7
0°-60°	609.5	94.6
0°-90°	644.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	644.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	513	513	513	513	513	
5°	492	500	500	504	510	46
15°	395	408	429	460	479	110
25°	274	292	325	375	415	125
35°	149	169	213	279	334	92
45°	33	52	107	189	256	30
55°	9	10	28	104	165	8
65°	3	4	14	33	66	4
75°	3	8	8	8	8	3
85°	3	5	5	5	4	2
90°	0	0	0	0	0	



TEST NUMBER: P1060472

CATALOG NUMBER: S124RDR-S575D835-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	513.2	513.2	513.2	513.2	513.2
2.5°	505.7	511.8	508.4	509.8	511.1
5°	492.1	499.6	500.2	504.3	510.4
7.5°	473.1	481.9	487.3	497.5	507.0
10°	448.6	459.5	471.0	487.3	499.6
12.5°	422.8	434.3	451.3	474.4	490.7
15°	394.9	407.8	428.9	459.5	479.2
17.5°	365.7	379.9	405.1	441.1	466.3
20°	335.8	351.4	379.3	420.0	450.6
22.5°	305.2	321.5	352.1	398.3	434.3
25°	273.9	291.6	324.9	375.2	415.3
27.5°	244.0	260.3	297.0	352.1	396.2
30°	211.4	229.7	269.1	328.3	374.5
32.5°	181.5	199.1	240.6	303.8	354.1
35°	148.8	168.6	212.7	279.3	333.7
37.5°	118.3	137.3	185.6	256.2	314.0
40°	88.4	108.1	157.7	233.1	293.6
42.5°	59.1	80.2	131.2	209.3	274.6
45°	32.6	52.3	106.7	188.9	255.6
47.5°	17.0	28.5	83.6	168.6	235.2
50°	12.9	15.6	61.9	146.1	212.1
52.5°	10.9	11.6	42.1	123.7	188.9
55°	8.8	9.5	28.5	104.0	165.2
57.5°	6.8	7.5	20.4	85.0	138.7
60°	5.4	6.1	17.0	65.2	114.2
62.5°	4.1	4.8	16.3	48.3	89.7
65°	3.4	4.1	14.3	32.6	65.9
67.5°	2.7	4.1	12.2	21.1	44.2
70°	2.7	5.4	10.2	13.6	24.5
72.5°	2.7	6.1	8.8	8.8	8.8
75°	2.7	7.5	8.2	7.5	7.5
77.5°	2.7	6.8	6.8	6.8	6.8
80°	2.7	6.1	6.1	6.1	5.4
82.5°	2.7	5.4	6.1	6.1	4.8
85°	2.7	5.4	5.4	5.4	4.1
87.5°	2.0	5.4	5.4	5.4	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)