

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: P1060469

Luminaire Tested: S124RDR-S575D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060469
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

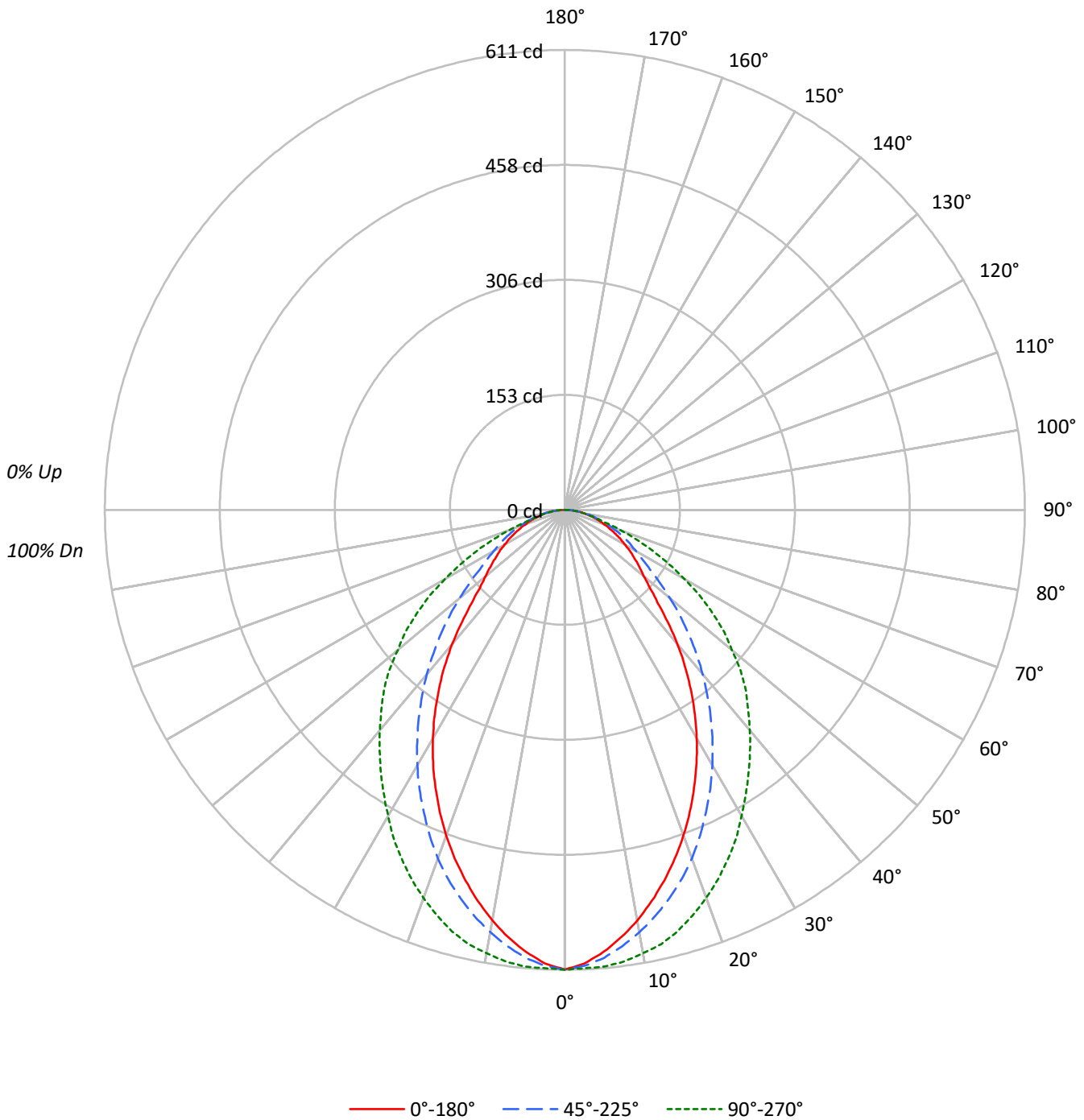
Lumens per Lamp: N/A
Luminaire Lumens: 1112.0 lumens
Efficiency: N/A
Efficacy: 56.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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: P1060469

CATALOG NUMBER: S124RDR-S575D830-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1060469

CATALOG NUMBER: S124RDR-S575D830-X4F0-XX-UDD-WVL-S

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	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75	75	75	75	75	75	75														
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	65	65	65	65	65														
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57	57	57	57														
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50	50	50	50	50	50	50														
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45														
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41	41	41	41	41	41	41														
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37	37	37	37	37	37	37														
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34	34	34	34	34	34	34														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31	31	31	31	31	31	31														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5260	5260	5260
5°	5097	5164	5263
10°	4842	4982	5229
15°	4544	4766	5165
20°	4219	4518	5028
25°	3863	4210	4867
30°	3482	3896	4666
35°	3070	3554	4476
40°	2612	3203	4296
45°	2121	2830	4141
50°	1835	2435	3877
55°	1701	2067	3596
60°	1588	1863	3153
65°	1487	1748	2622
70°	1387	1611	1984
75°	1321	1491	1427
80°	1240	1364	1205
85°	1136	1265	948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4141 cd/sqm



TEST NUMBER: P1060469

CATALOG NUMBER: S124RDR-S575D830-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	5.1
10°-20°	151.6	13.6
20°-30°	207.0	18.6
30°-40°	216.8	19.5
40°-50°	187.7	16.9
50°-60°	141.0	12.7
60°-70°	90.9	8.2
70°-80°	46.6	4.2
80°-90°	13.9	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°	415.0	37.3
0°-40°	631.8	56.8
0°-60°	960.5	86.4
0°-90°	1112.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1112.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	611	611	611	611	611	
5°	590	599	597	602	609	55
15°	510	522	535	559	579	143
25°	407	422	443	478	512	187
35°	292	309	338	383	426	182
45°	174	192	232	289	340	137
55°	113	117	138	197	240	102
65°	73	74	86	104	129	73
75°	40	44	45	44	43	42
85°	12	13	13	12	10	13
90°	0	0	0	0	0	



TEST NUMBER: P1060469

CATALOG NUMBER: S124RDR-S575D830-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	610.8	610.8	610.8	610.8	610.8
2.5°	603.1	610.8	606.3	607.6	609.5
5°	589.7	598.7	597.4	601.9	608.9
7.5°	573.0	582.6	584.6	594.8	605.1
10°	553.8	564.7	569.8	585.2	598.0
12.5°	532.7	544.2	553.2	572.4	591.0
15°	509.7	522.5	534.6	559.0	579.4
17.5°	486.0	498.8	514.8	541.7	564.7
20°	460.4	474.4	493.0	521.2	548.7
22.5°	434.1	448.8	468.7	499.4	531.4
25°	406.6	421.9	443.1	477.6	512.2
27.5°	379.0	394.4	418.1	454.6	492.4
30°	350.2	366.2	391.8	431.5	469.3
32.5°	321.4	338.7	365.0	407.2	447.6
35°	292.0	308.6	338.1	382.9	425.8
37.5°	262.5	279.8	311.2	359.2	404.0
40°	232.4	250.3	284.9	335.5	382.2
42.5°	202.3	221.5	258.0	311.2	360.5
45°	174.2	192.1	232.4	289.4	340.0
47.5°	153.0	165.2	206.8	268.3	316.9
50°	137.0	143.4	181.8	245.2	289.4
52.5°	124.9	129.3	158.8	220.3	267.0
55°	113.3	117.2	137.7	196.6	239.5
57.5°	103.1	105.0	121.7	173.5	213.2
60°	92.2	94.1	108.2	148.5	183.1
62.5°	82.6	83.9	97.3	124.9	155.6
65°	73.0	74.3	85.8	103.7	128.7
67.5°	64.0	65.9	74.9	84.5	102.4
70°	55.1	58.9	64.0	68.5	78.8
72.5°	47.4	51.2	53.8	55.1	55.7
75°	39.7	44.2	44.8	44.2	42.9
77.5°	32.0	35.9	35.9	34.6	33.3
80°	25.0	28.2	27.5	26.3	24.3
82.5°	18.6	20.5	19.8	18.6	16.6
85°	11.5	13.4	12.8	12.2	9.6
87.5°	5.8	7.7	7.0	6.4	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)