

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: P1060463

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060463
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-S575D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

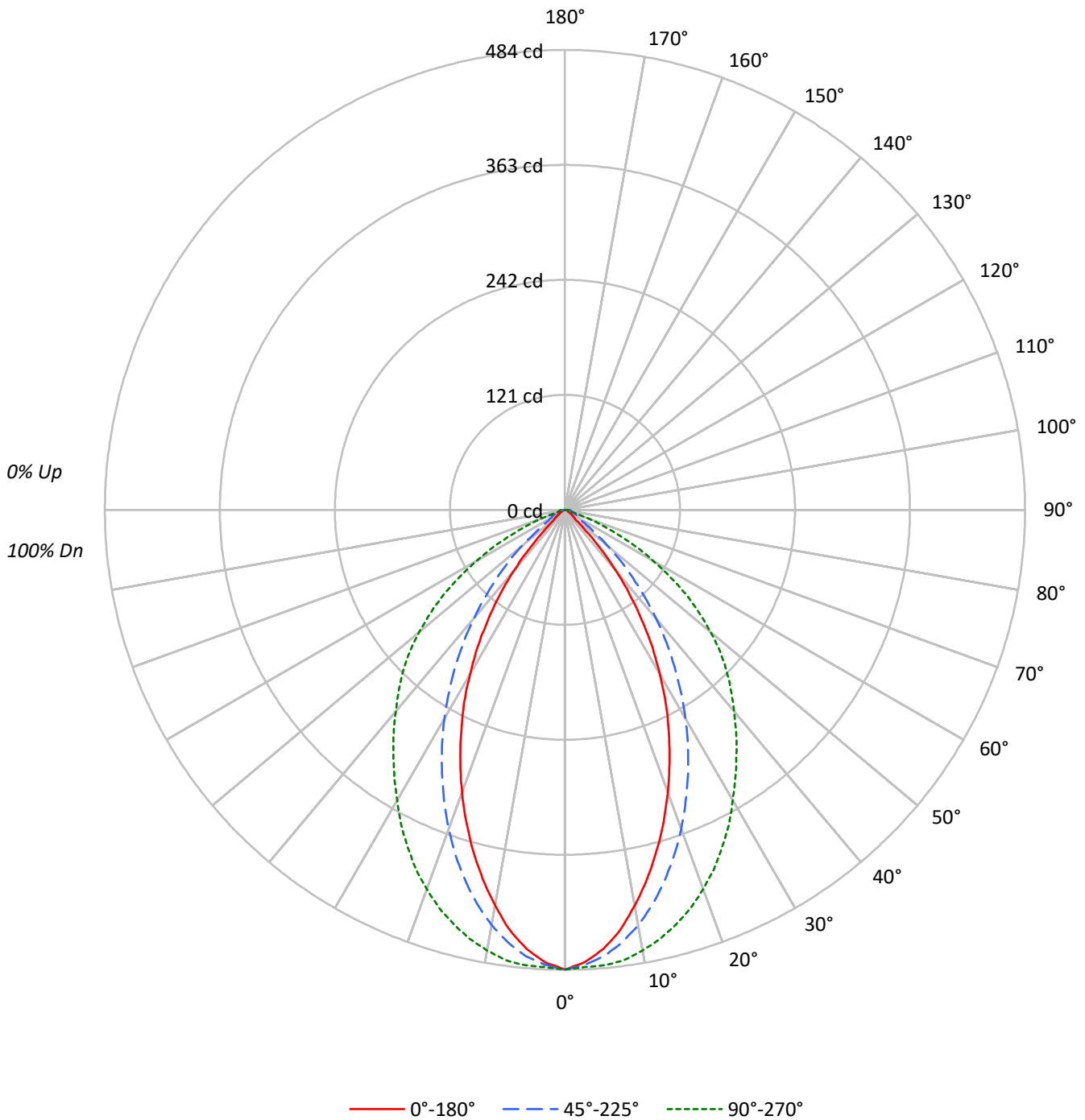
Lumens per Lamp: N/A
Luminaire Lumens: 607.0 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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	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°	4165	4165	4165
5°	4009	4076	4159
10°	3697	3881	4118
15°	3318	3603	4026
20°	2900	3276	3892
25°	2453	2909	3719
30°	1981	2523	3510
35°	1475	2108	3306
40°	936	1670	3110
45°	374	1225	2934
50°	163	781	2678
55°	125	404	2338
60°	88	276	1853
65°	65	275	1265
70°	65	242	582
75°	87	256	233
80°	129	288	253
85°	257	504	375

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2934 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.3	7.3
10°-20°	114.2	18.8
20°-30°	144.2	23.8
30°-40°	132.5	21.8
40°-50°	90.3	14.9
50°-60°	49.0	8.1
60°-70°	20.8	3.4
70°-80°	7.2	1.2
80°-90°	4.6	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°	302.7	49.9
0°-40°	435.2	71.7
0°-60°	574.5	94.6
0°-90°	607.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	607.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	484	484	484	484	484	
5°	464	471	472	475	481	43
15°	372	384	404	433	452	104
25°	258	275	306	354	391	118
35°	140	159	200	263	314	87
45°	31	49	101	178	241	28
55°	8	9	27	98	156	7
65°	3	4	14	31	62	3
75°	3	7	8	7	7	3
85°	3	5	5	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	483.7	483.7	483.7	483.7	483.7
2.5°	476.6	482.4	479.2	480.5	481.7
5°	463.8	470.9	471.5	475.3	481.1
7.5°	445.9	454.2	459.3	468.9	477.9
10°	422.8	433.1	443.9	459.3	470.9
12.5°	398.5	409.4	425.4	447.2	462.5
15°	372.2	384.4	404.2	433.1	451.6
17.5°	344.7	358.1	381.8	415.8	439.5
20°	316.5	331.2	357.5	395.9	424.7
22.5°	287.6	303.0	331.8	375.4	409.4
25°	258.2	274.8	306.2	353.6	391.4
27.5°	230.0	245.4	280.0	331.8	373.5
30°	199.2	216.5	253.7	309.4	353.0
32.5°	171.0	187.7	226.8	286.4	333.8
35°	140.3	158.9	200.5	263.3	314.5
37.5°	111.5	129.4	174.9	241.5	296.0
40°	83.3	101.9	148.6	219.7	276.7
42.5°	55.7	75.6	123.6	197.3	258.8
45°	30.7	49.3	100.6	178.1	240.9
47.5°	16.0	26.9	78.8	158.9	221.7
50°	12.2	14.7	58.3	137.7	199.9
52.5°	10.2	10.9	39.7	116.6	178.1
55°	8.3	9.0	26.9	98.0	155.7
57.5°	6.4	7.0	19.2	80.1	130.7
60°	5.1	5.8	16.0	61.5	107.6
62.5°	3.8	4.5	15.4	45.5	84.6
65°	3.2	3.8	13.5	30.7	62.1
67.5°	2.6	3.8	11.5	19.9	41.6
70°	2.6	5.1	9.6	12.8	23.1
72.5°	2.6	5.8	8.3	8.3	8.3
75°	2.6	7.0	7.7	7.0	7.0
77.5°	2.6	6.4	6.4	6.4	6.4
80°	2.6	5.8	5.8	5.8	5.1
82.5°	2.6	5.1	5.8	5.8	4.5
85°	2.6	5.1	5.1	5.1	3.8
87.5°	1.9	5.1	5.1	5.1	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)