

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: P1060493

Luminaire Tested: S124RDR-S575D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060493
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-S575D850-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

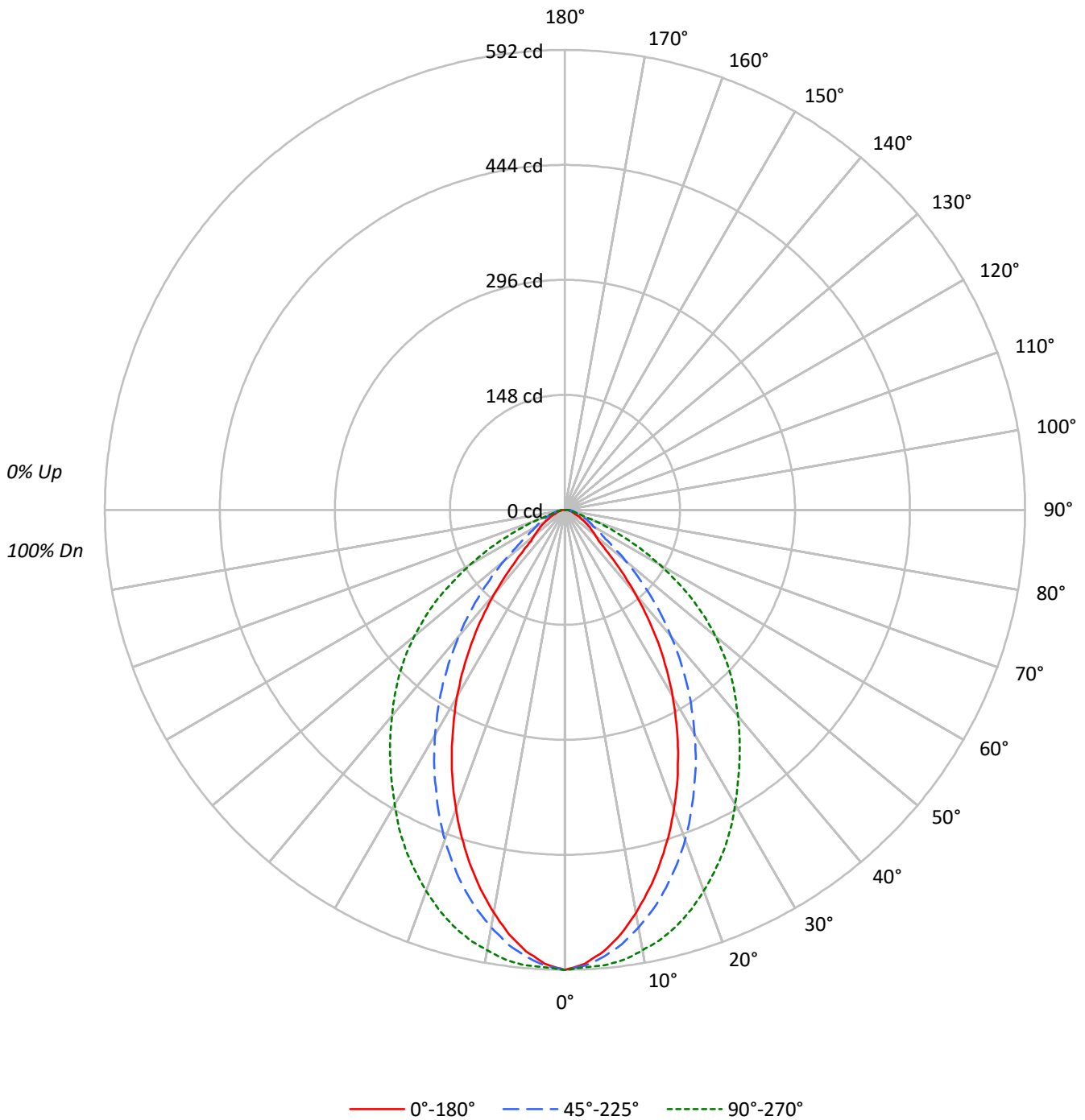
Lumens per Lamp: N/A
Luminaire Lumens: 832.9 lumens
Efficiency: N/A
Efficacy: 42.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	46	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°	5100	5100	5100
5°	4931	4990	5088
10°	4606	4771	5034
15°	4206	4488	4944
20°	3757	4144	4785
25°	3272	3738	4597
30°	2757	3319	4353
35°	2202	2876	4120
40°	1584	2389	3888
45°	955	1881	3680
50°	686	1362	3383
55°	577	916	2998
60°	467	727	2415
65°	369	660	1736
70°	322	551	929
75°	299	502	452
80°	298	526	412
85°	445	741	524

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3680 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	6.5
10°-20°	142.5	17.1
20°-30°	184.9	22.2
30°-40°	177.7	21.3
40°-50°	131.8	15.8
50°-60°	80.8	9.7
60°-70°	39.2	4.7
70°-80°	15.0	1.8
80°-90°	6.7	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°	381.7	45.8
0°-40°	559.4	67.2
0°-60°	772.0	92.7
0°-90°	832.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	832.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	570	579	577	582	589	53
15°	472	485	503	534	555	132
25°	344	362	393	444	484	157
35°	210	228	274	338	392	130
45°	78	98	154	236	302	65
55°	38	40	61	138	200	34
65°	18	20	32	51	85	19
75°	9	14	15	14	14	10
85°	4	8	8	7	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	592.3	592.3	592.3	592.3	592.3
2.5°	584.8	591.6	587.1	588.6	589.3
5°	570.5	578.8	577.3	582.5	588.6
7.5°	550.9	560.7	563.7	574.2	584.0
10°	526.8	538.8	545.6	562.9	575.7
12.5°	500.4	513.2	526.0	549.4	566.7
15°	471.8	485.3	503.4	533.5	554.6
17.5°	441.6	456.7	478.5	514.7	539.6
20°	410.0	425.8	452.2	492.1	522.2
22.5°	377.6	394.1	423.5	468.0	503.4
25°	344.4	361.7	393.4	443.9	483.8
27.5°	310.5	328.6	364.7	418.2	462.0
30°	277.3	294.7	333.8	391.9	437.8
32.5°	243.4	261.5	303.7	364.7	414.5
35°	209.5	228.3	273.6	338.4	391.9
37.5°	174.8	195.2	242.7	312.7	369.3
40°	140.9	160.5	212.5	286.4	345.9
42.5°	107.8	128.9	183.9	260.0	324.0
45°	78.4	98.0	154.5	235.9	302.2
47.5°	58.8	70.8	127.4	213.3	278.1
50°	51.2	53.5	101.7	188.4	252.5
52.5°	44.5	46.0	79.1	161.3	226.8
55°	38.4	39.9	61.0	137.9	199.7
57.5°	32.4	33.9	49.0	115.3	168.8
60°	27.1	28.6	42.2	91.9	140.2
62.5°	22.6	23.4	37.7	70.1	112.3
65°	18.1	19.6	32.4	51.2	85.2
67.5°	15.1	16.6	26.4	35.4	59.5
70°	12.8	16.6	21.9	24.9	36.9
72.5°	10.6	15.1	18.1	17.3	17.3
75°	9.0	14.3	15.1	13.6	13.6
77.5°	7.5	12.8	12.1	11.3	10.6
80°	6.0	10.6	10.6	9.0	8.3
82.5°	5.3	8.3	8.3	8.3	6.8
85°	4.5	7.5	7.5	6.8	5.3
87.5°	3.0	6.0	6.8	6.0	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)