

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: P1059305

Luminaire Tested: S123RDR-S560D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059305
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D935-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

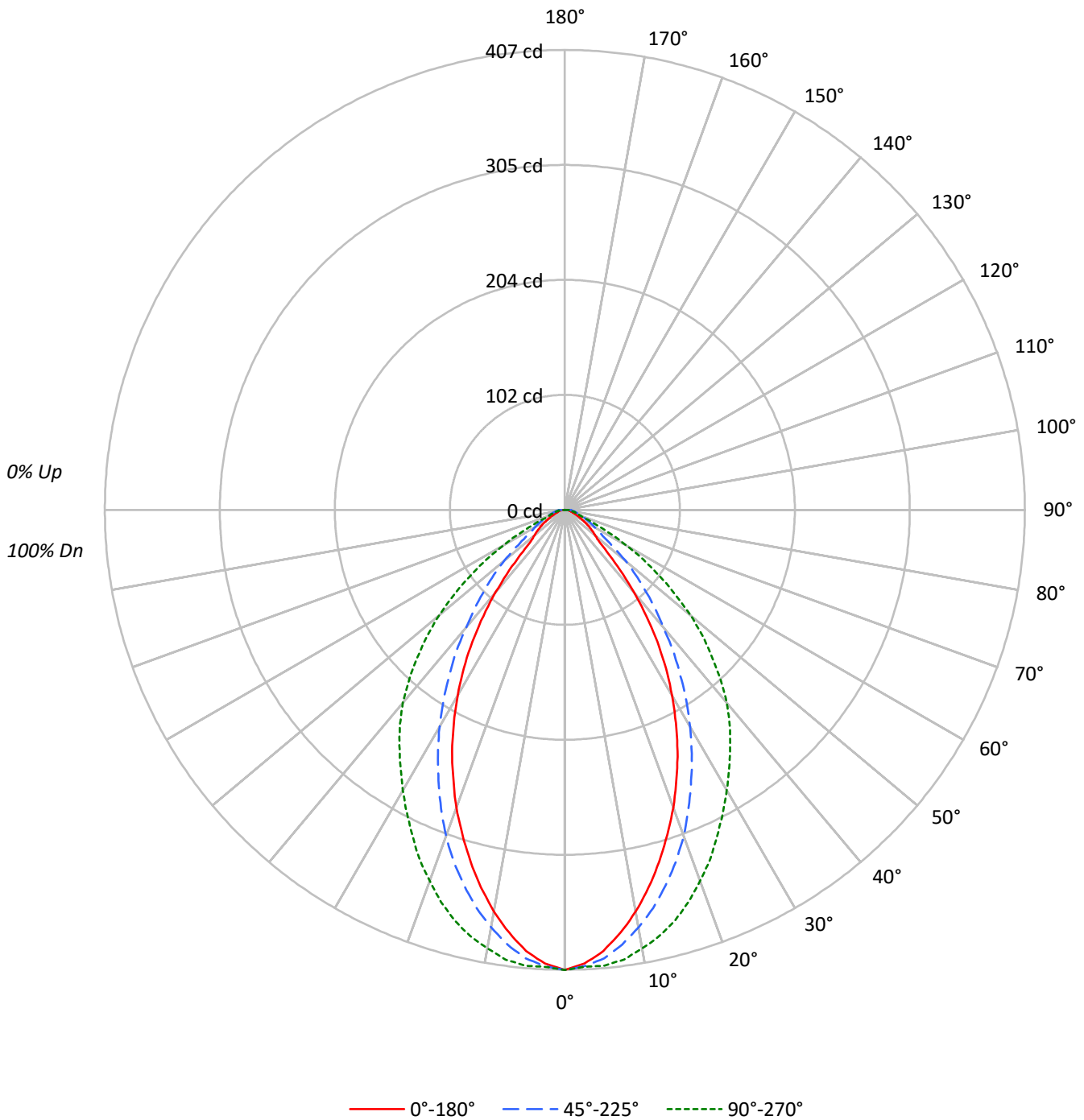
Lumens per Lamp: N/A
Luminaire Lumens: 545.4 lumens
Efficiency: N/A
Efficacy: 27.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79			79	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64			64	
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58			58	
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52			52	
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48			48	
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44			44	
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40			40	
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37			37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4782	4782	4782
5°	4618	4695	4771
10°	4302	4473	4699
15°	3917	4184	4575
20°	3506	3840	4367
25°	3058	3427	4128
30°	2571	3006	3885
35°	2046	2547	3655
40°	1458	2077	3417
45°	869	1669	3061
50°	641	1271	2649
55°	536	864	2105
60°	432	712	1480
65°	347	611	792
70°	285	532	491
75°	268	513	458
80°	284	561	440
85°	404	795	566

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3061 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.4	6.9
10°-20°	97.2	17.8
20°-30°	123.9	22.7
30°-40°	116.6	21.4
40°-50°	83.8	15.4
50°-60°	48.0	8.8
60°-70°	22.0	4.0
70°-80°	11.0	2.0
80°-90°	5.4	1.0
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°	258.5	47.4
0°-40°	375.1	68.8
0°-60°	507.0	93.0
0°-90°	545.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	545.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	407	407	407	407	407	
5°	392	400	398	401	405	36
15°	322	334	344	363	376	90
25°	236	247	264	293	319	108
35°	143	153	178	218	255	88
45°	52	64	100	148	184	44
55°	26	27	42	78	103	23
65°	12	17	22	24	28	13
75°	6	12	11	10	10	7
85°	3	6	6	5	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	407.2	407.2	407.2	407.2	407.2
2.5°	401.9	407.8	404.2	404.2	404.8
5°	391.8	399.5	398.3	401.3	404.8
7.5°	377.5	385.8	388.2	395.3	401.3
10°	360.8	370.4	375.1	386.4	394.1
12.5°	342.4	353.1	360.8	375.1	386.4
15°	322.2	333.5	344.2	362.6	376.3
17.5°	301.4	312.7	326.4	347.8	363.8
20°	280.6	291.9	307.3	329.9	349.5
22.5°	258.0	269.3	285.9	311.5	335.3
25°	236.0	246.7	264.5	293.1	318.6
27.5°	212.8	223.5	243.1	274.0	302.6
30°	189.6	200.3	221.7	255.0	286.5
32.5°	166.4	176.6	199.7	236.6	270.5
35°	142.7	152.8	177.7	218.2	255.0
37.5°	118.3	128.4	157.5	201.5	239.6
40°	95.1	106.4	135.5	184.9	222.9
42.5°	72.5	84.4	117.7	167.0	203.9
45°	52.3	63.6	100.5	148.0	184.3
47.5°	39.8	45.8	85.0	129.0	165.3
50°	35.1	35.7	69.6	111.8	145.0
52.5°	30.3	30.9	54.1	95.1	123.6
55°	26.2	26.8	42.2	77.9	102.8
57.5°	22.0	23.2	34.5	61.8	82.6
60°	18.4	20.8	30.3	47.0	63.0
62.5°	14.9	19.0	26.2	34.5	45.2
65°	12.5	17.2	22.0	24.4	28.5
67.5°	10.1	16.1	18.4	17.2	17.2
70°	8.3	14.3	15.5	14.3	14.3
72.5°	7.1	13.7	13.1	11.9	11.9
75°	5.9	11.9	11.3	10.1	10.1
77.5°	5.4	10.1	9.5	8.9	8.3
80°	4.2	8.3	8.3	7.7	6.5
82.5°	3.6	7.1	7.1	6.5	5.4
85°	3.0	5.9	5.9	5.4	4.2
87.5°	2.4	5.4	5.4	4.8	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)