

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: P1059302

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059302
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D935-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

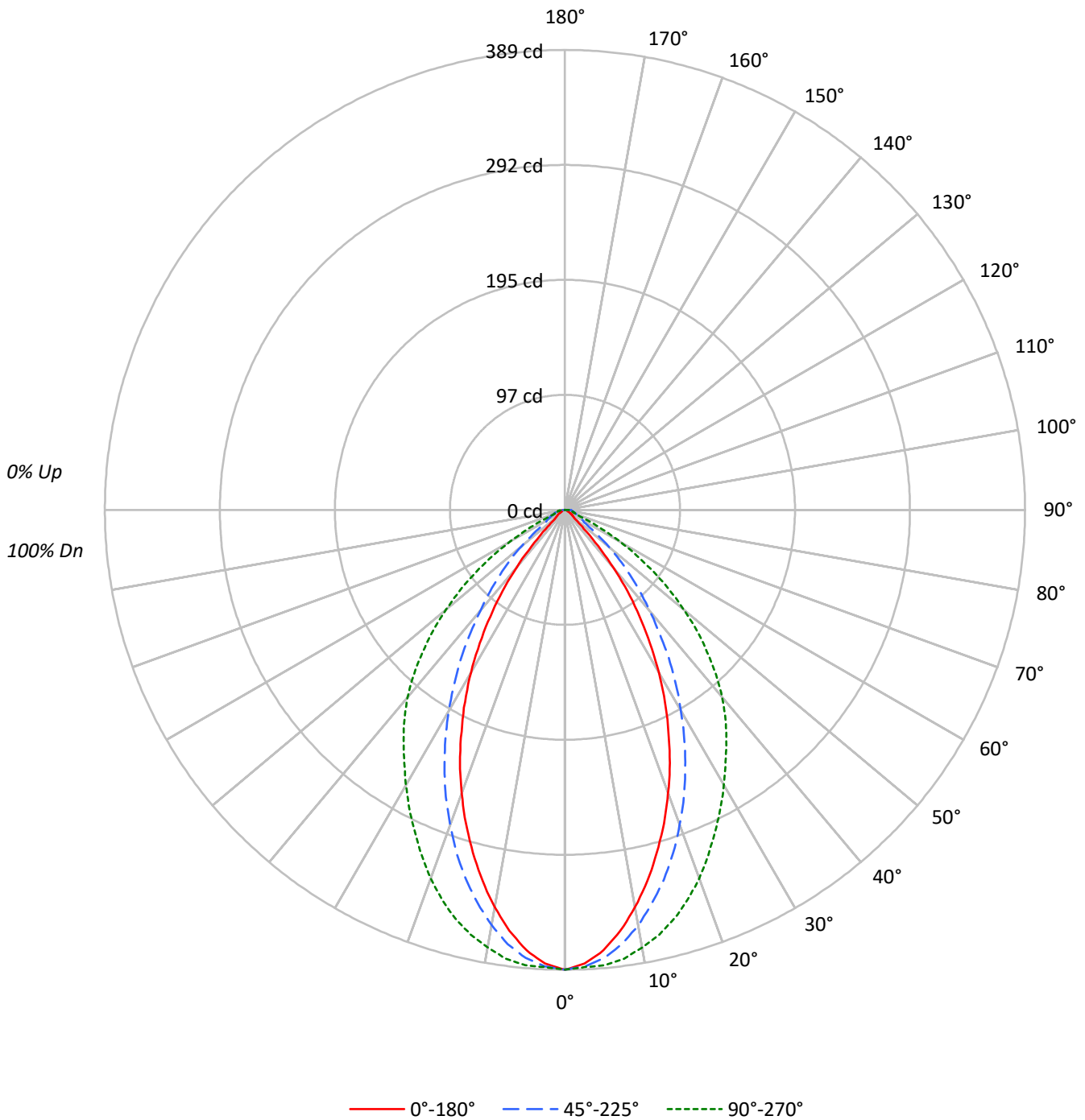
Lumens per Lamp: N/A
Luminaire Lumens: 467.1 lumens
Efficiency: N/A
Efficacy: 23.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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									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	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	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																												
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81																												
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73																												
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66																												
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60																												
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55																												
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50																												
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46																												
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43																												
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4567	4567	4567
5°	4408	4485	4556
10°	4070	4253	4481
15°	3651	3933	4351
20°	3188	3544	4146
25°	2681	3120	3891
30°	2153	2660	3645
35°	1577	2190	3409
40°	975	1705	3171
45°	375	1284	2825
50°	185	881	2389
55°	145	487	1875
60°	99	404	1256
65°	83	364	561
70°	82	326	326
75°	109	349	322
80°	162	440	365
85°	243	728	485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2825 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.7	7.6
10°-20°	91.3	19.5
20°-30°	113.3	24.3
30°-40°	101.5	21.7
40°-50°	66.7	14.3
50°-60°	33.4	7.2
60°-70°	13.2	2.8
70°-80°	7.4	1.6
80°-90°	4.7	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°	240.2	51.4
0°-40°	341.7	73.2
0°-60°	441.9	94.6
0°-90°	467.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	467.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	389	389	389	389	389	
5°	374	380	380	383	386	35
15°	300	310	324	346	358	84
25°	207	220	241	275	300	95
35°	110	125	153	200	238	68
45°	23	38	77	130	170	21
55°	7	8	24	64	92	6
65°	3	8	13	17	20	3
75°	2	8	8	7	7	3
85°	2	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°	388.9	388.9	388.9	388.9	388.9
2.5°	384.1	389.5	386.5	386.5	387.1
5°	374.0	379.9	380.5	382.9	386.5
7.5°	359.1	366.9	370.4	377.6	382.9
10°	341.3	349.6	356.7	369.2	375.8
12.5°	321.7	330.0	340.7	357.9	368.0
15°	300.3	309.8	323.5	345.5	357.9
17.5°	278.3	287.8	304.4	329.4	345.5
20°	255.1	265.8	283.6	312.2	331.8
22.5°	231.9	243.8	262.8	293.7	316.3
25°	206.9	220.0	240.8	274.7	300.3
27.5°	183.1	196.8	218.8	255.7	284.8
30°	158.8	172.4	196.2	236.0	268.8
32.5°	133.8	149.2	174.2	217.6	252.7
35°	110.0	124.9	152.8	199.8	237.8
37.5°	86.8	101.7	130.8	182.5	223.0
40°	63.6	79.1	111.2	165.9	206.9
42.5°	41.6	57.7	93.9	149.2	189.1
45°	22.6	37.5	77.3	130.2	170.1
47.5°	12.5	20.2	62.4	112.4	151.6
50°	10.1	11.3	48.2	95.7	130.8
52.5°	8.3	9.5	34.5	79.7	111.8
55°	7.1	8.3	23.8	64.2	91.6
57.5°	5.9	7.1	19.0	49.4	71.9
60°	4.2	7.1	17.2	36.3	53.5
62.5°	3.6	7.1	14.9	25.0	35.7
65°	3.0	8.3	13.1	16.6	20.2
67.5°	2.4	8.3	11.3	10.7	10.7
70°	2.4	8.3	9.5	8.9	9.5
72.5°	2.4	8.9	8.9	8.3	8.3
75°	2.4	7.7	7.7	7.1	7.1
77.5°	2.4	7.1	7.1	6.5	6.5
80°	2.4	6.5	6.5	5.9	5.4
82.5°	2.4	5.9	5.9	5.4	4.8
85°	1.8	5.4	5.4	5.4	3.6
87.5°	1.8	4.8	5.4	4.8	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)