

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: P1059304

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059304
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
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-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

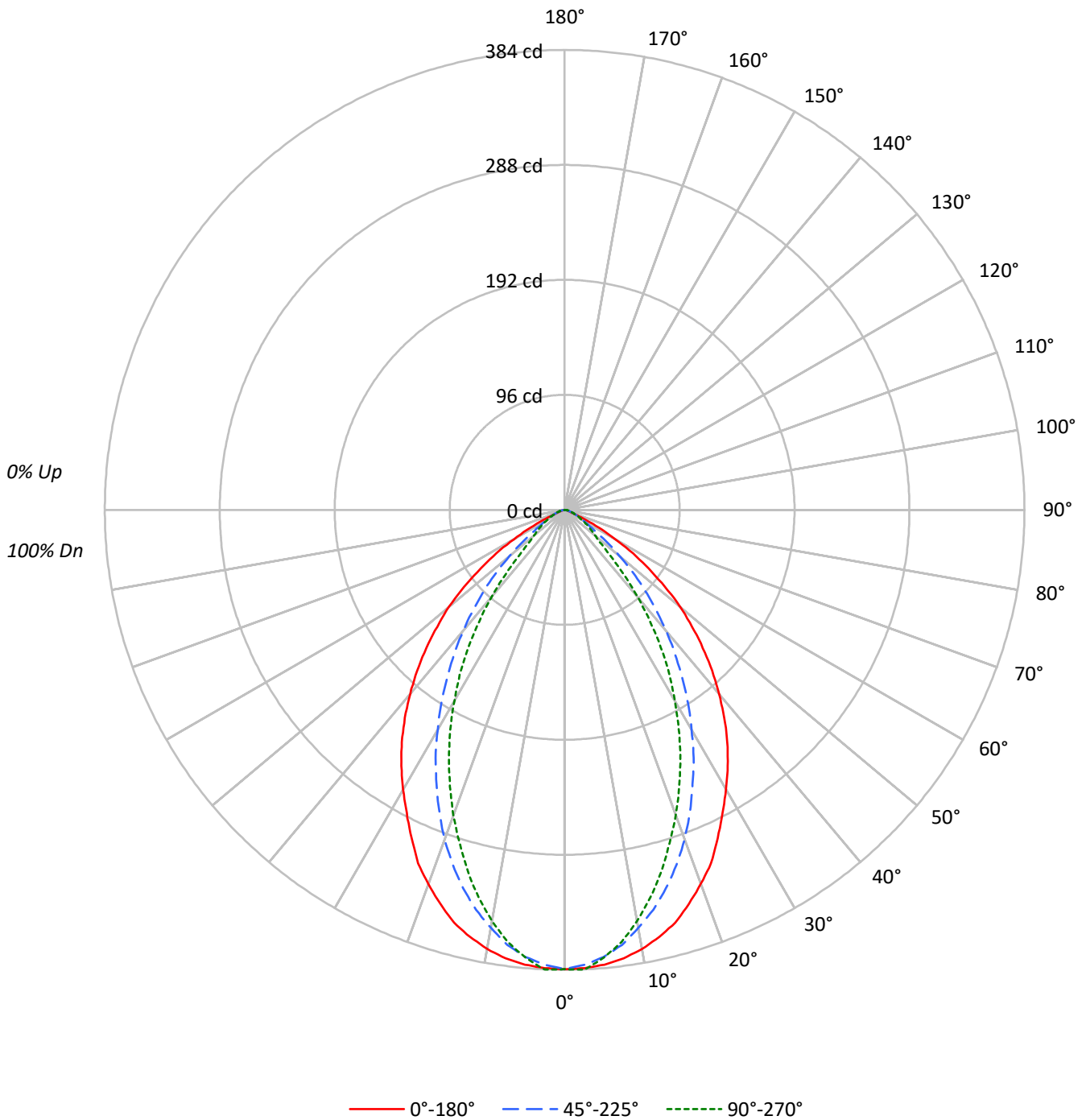
Lumens per Lamp: N/A
Luminaire Lumens: 495.2 lumens
Efficiency: N/A
Efficacy: 25.3 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059304

CATALOG NUMBER: S123RDR-S560D935-X4F0-XX-UDD-SVL-B

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				
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91				
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55				
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4504	4504	4504
5°	4493	4417	4424
10°	4439	4227	4157
15°	4339	3978	3798
20°	4155	3659	3391
25°	3917	3278	2962
30°	3656	2875	2496
35°	3396	2451	2008
40°	3076	2020	1456
45°	2712	1568	878
50°	2300	1096	597
55°	1750	657	497
60°	1144	418	390
65°	478	314	314
70°	165	223	244
75°	136	163	191
80°	81	122	162
85°	81	81	162

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2712 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	7.2
10°-20°	92.7	18.7
20°-30°	118.9	24.0
30°-40°	111.6	22.5
40°-50°	77.8	15.7
50°-60°	40.3	8.1
60°-70°	13.8	2.8
70°-80°	3.9	0.8
80°-90°	0.8	0.2
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°	247.1	49.9
0°-40°	358.6	72.4
0°-60°	476.7	96.3
0°-90°	495.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	495.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	381	381	375	376	375	36
15°	357	348	327	316	312	100
25°	302	283	253	236	229	139
35°	237	208	171	149	140	148
45°	163	134	94	65	53	126
55°	86	64	32	25	24	77
65°	17	15	11	11	11	20
75°	3	3	4	4	4	3
85°	1	1	1	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	383.6	383.6	383.6	383.6	383.6
2.5°	383.0	383.6	380.1	383.6	384.2
5°	381.2	380.6	374.7	376.5	375.3
7.5°	377.7	375.9	366.4	364.0	364.0
10°	372.3	368.8	354.5	350.4	348.6
12.5°	365.2	360.5	342.0	334.3	331.4
15°	356.9	348.0	327.2	316.5	312.4
17.5°	345.0	333.1	310.6	298.1	291.6
20°	332.5	317.7	292.8	277.9	271.4
22.5°	319.5	301.7	273.2	257.1	250.0
25°	302.3	283.3	253.0	235.8	228.6
27.5°	285.6	265.4	233.4	213.8	206.7
30°	269.6	245.8	212.0	193.0	184.1
32.5°	253.6	226.8	191.8	171.0	162.7
35°	236.9	207.8	171.0	149.1	140.1
37.5°	219.1	189.4	151.4	127.7	117.0
40°	200.7	169.8	131.8	105.1	95.0
42.5°	182.3	152.0	112.2	84.9	73.0
45°	163.3	133.6	94.4	65.3	52.9
47.5°	144.3	115.2	77.2	47.5	39.8
50°	125.9	98.0	60.0	35.0	32.7
52.5°	105.7	81.4	45.1	29.1	28.5
55°	85.5	64.1	32.1	24.9	24.3
57.5°	67.7	49.9	23.2	20.8	20.2
60°	48.7	35.6	17.8	17.2	16.6
62.5°	32.1	24.3	14.3	13.7	13.7
65°	17.2	14.8	11.3	10.7	11.3
67.5°	7.1	8.3	8.3	8.9	8.9
70°	4.8	5.3	6.5	7.1	7.1
72.5°	3.6	4.2	4.8	5.3	5.3
75°	3.0	3.0	3.6	4.2	4.2
77.5°	1.8	2.4	2.4	3.0	3.6
80°	1.2	1.8	1.8	2.4	2.4
82.5°	0.6	1.2	1.2	1.8	1.8
85°	0.6	0.6	0.6	0.6	1.2
87.5°	0.0	0.0	0.0	0.0	0.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)