

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: P1059306

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059306  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
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-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

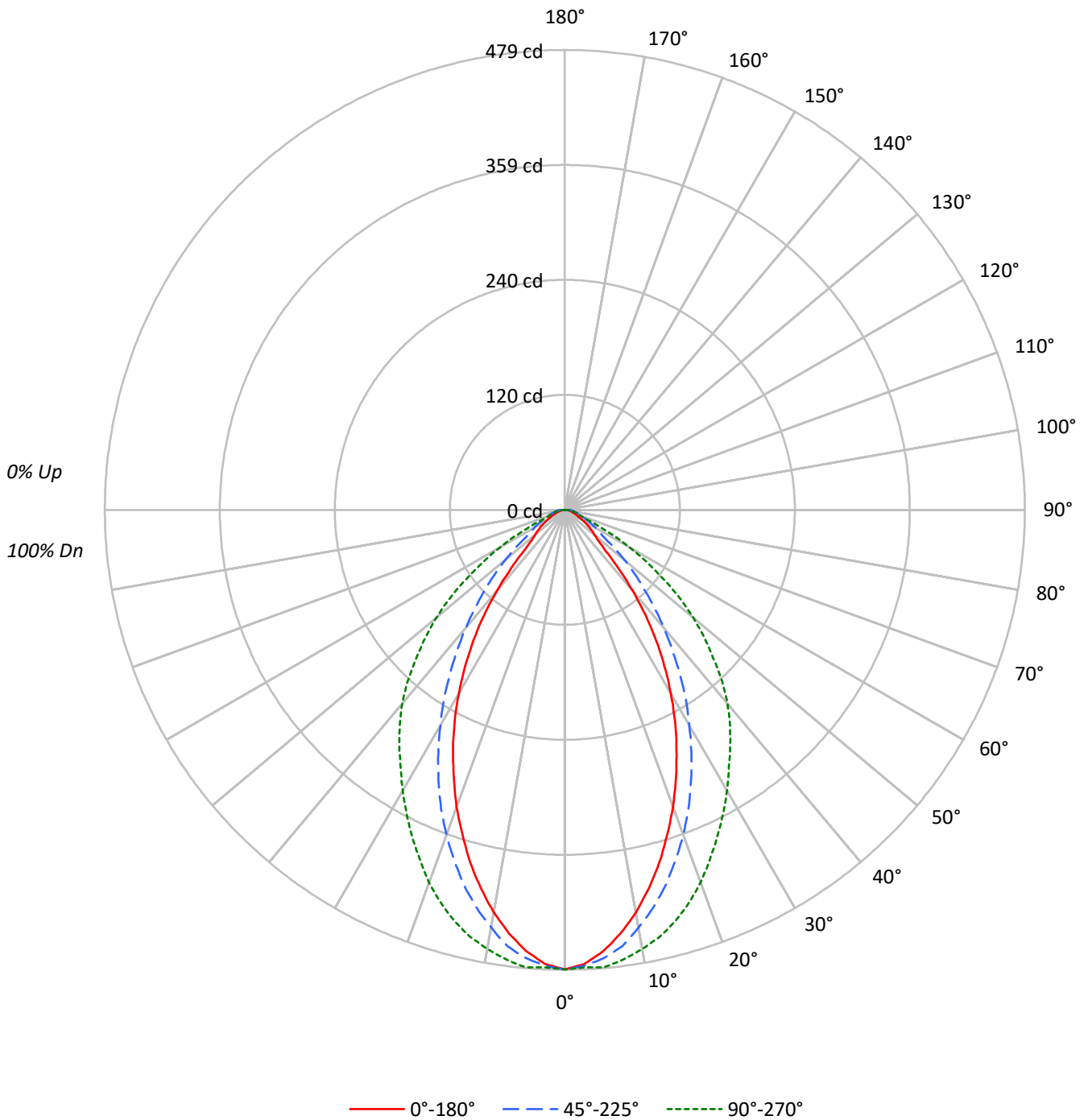
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 642.5 lumens  
Efficiency: N/A  
Efficacy: 32.8 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.08 / 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	102	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	90	81	74	68	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	60	69	64	60	68	63	59	58				58
6	79	68	61	55	78	67	60	55	66	59	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	55	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	49	43	39	49	43	39	48	43	39	37				37

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5621	5621	5621
5°	5439	5524	5636
10°	5076	5268	5537
15°	4626	4922	5393
20°	4116	4502	5165
25°	3567	4029	4869
30°	2991	3514	4579
35°	2370	2992	4305
40°	1677	2460	4038
45°	988	1945	3633
50°	738	1478	3182
55°	620	999	2557
60°	503	853	1815
65°	397	728	959
70°	347	632	591
75°	322	594	567
80°	325	642	561
85°	404	957	728

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3633 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.0	6.9
10°-20°	114.5	17.8
20°-30°	145.8	22.7
30°-40°	137.1	21.3
40°-50°	98.8	15.4
50°-60°	57.1	8.9
60°-70°	26.1	4.1
70°-80°	13.0	2.0
80°-90°	6.1	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°	304.3	47.4
0°-40°	441.5	68.7
0°-60°	597.3	93.0
0°-90°	642.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	642.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	461	469	469	473	478	43
15°	380	394	405	428	444	106
25°	275	290	311	346	376	126
35°	165	180	209	257	300	103
45°	60	74	117	176	219	50
55°	30	32	49	93	125	27
65°	14	20	26	29	34	15
75°	7	14	13	12	12	8
85°	3	6	7	6	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	478.7	478.7	478.7	478.7	478.7
2.5°	473.3	479.3	475.1	475.7	476.9
5°	461.4	469.1	468.6	473.3	478.1
7.5°	444.8	453.7	458.4	465.6	472.1
10°	425.7	435.8	441.8	454.9	464.4
12.5°	403.7	416.8	424.5	441.8	455.5
15°	380.5	394.2	404.9	427.5	443.6
17.5°	354.4	369.3	382.9	409.7	429.3
20°	329.4	343.7	360.3	389.5	413.3
22.5°	302.1	317.5	336.5	367.5	394.2
25°	275.3	289.6	311.0	345.5	375.8
27.5°	248.5	262.8	285.4	323.5	356.8
30°	220.6	235.5	259.2	301.5	337.7
32.5°	193.2	207.5	234.3	280.1	318.1
35°	165.3	179.6	208.7	256.9	300.3
37.5°	137.9	152.8	183.7	237.8	282.4
40°	109.4	125.5	160.5	218.2	263.4
42.5°	82.7	99.9	137.4	198.0	242.6
45°	59.5	74.3	117.1	176.0	218.8
47.5°	46.4	54.1	98.7	153.4	196.8
50°	40.4	41.6	80.9	132.6	174.2
52.5°	35.1	36.3	63.6	113.0	150.4
55°	30.3	31.5	48.8	92.8	124.9
57.5°	25.6	27.4	40.4	73.7	100.5
60°	21.4	23.8	36.3	56.5	77.3
62.5°	17.2	21.4	30.9	41.6	55.3
65°	14.3	20.2	26.2	29.1	34.5
67.5°	11.9	18.4	22.0	20.8	20.2
70°	10.1	16.6	18.4	16.6	17.2
72.5°	8.3	15.5	15.5	14.3	14.3
75°	7.1	13.7	13.1	12.5	12.5
77.5°	5.9	11.9	11.3	10.7	10.1
80°	4.8	9.5	9.5	8.9	8.3
82.5°	4.2	7.7	7.7	7.7	6.5
85°	3.0	6.5	7.1	6.5	5.4
87.5°	2.4	5.9	5.9	5.4	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)