

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: P1059286

Luminaire Tested: S123RDR-S560D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059286  
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-S560D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

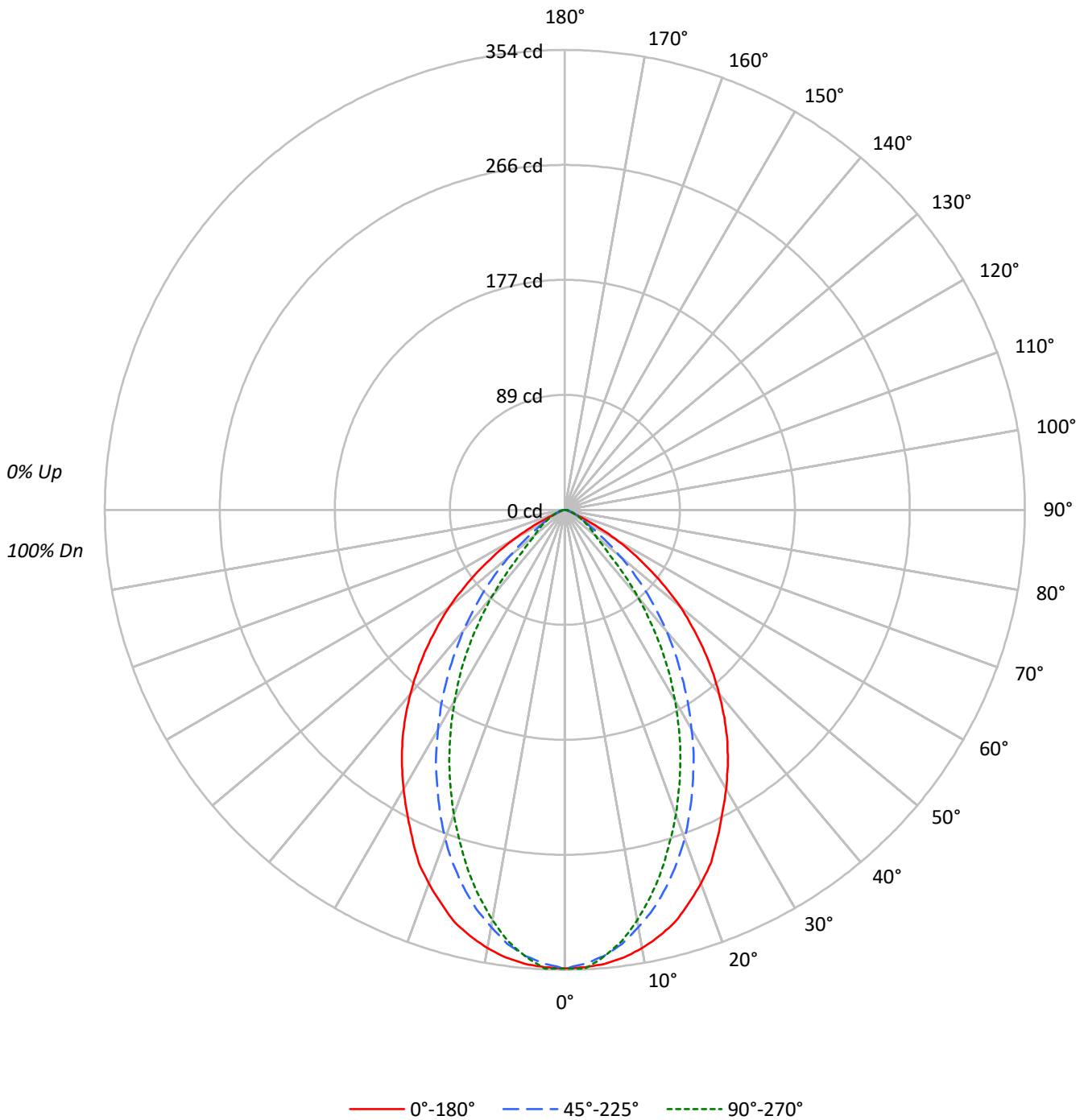
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 455.6 lumens  
Efficiency: N/A  
Efficacy: 23.2 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

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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				
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	71	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	49	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°	4145	4145	4145
5°	4135	4064	4070
10°	4085	3889	3824
15°	3992	3659	3494
20°	3824	3366	3120
25°	3603	3016	2726
30°	3364	2645	2297
35°	3125	2256	1848
40°	2831	1859	1340
45°	2496	1443	807
50°	2115	1008	550
55°	1611	604	459
60°	1052	385	359
65°	439	289	289
70°	151	206	227
75°	122	150	172
80°	74	108	149
85°	67	67	148

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2496 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.6	7.2
10°-20°	85.3	18.7
20°-30°	109.4	24.0
30°-40°	102.7	22.5
40°-50°	71.6	15.7
50°-60°	37.0	8.1
60°-70°	12.7	2.8
70°-80°	3.6	0.8
80°-90°	0.7	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°	227.3	49.9
0°-40°	330.0	72.4
0°-60°	438.6	96.3
0°-90°	455.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	455.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	353	353	353	353	353	
5°	351	350	345	346	345	33
15°	328	320	301	291	287	92
25°	278	261	233	217	210	128
35°	218	191	157	137	129	136
45°	150	123	87	60	49	116
55°	79	59	30	23	22	71
65°	16	14	10	10	10	19
75°	3	3	3	4	4	3
85°	0	0	0	0	1	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	353.0	353.0	353.0	353.0	353.0
2.5°	352.4	353.0	349.7	353.0	353.5
5°	350.8	350.2	344.8	346.4	345.3
7.5°	347.5	345.9	337.1	334.9	334.9
10°	342.6	339.3	326.2	322.4	320.7
12.5°	336.0	331.6	314.7	307.6	304.9
15°	328.4	320.2	301.0	291.2	287.4
17.5°	317.4	306.5	285.8	274.3	268.3
20°	306.0	292.3	269.4	255.7	249.7
22.5°	293.9	277.6	251.3	236.6	230.0
25°	278.1	260.6	232.8	216.9	210.4
27.5°	262.8	244.2	214.7	196.7	190.1
30°	248.1	226.2	195.1	177.6	169.4
32.5°	233.3	208.7	176.5	157.4	149.7
35°	218.0	191.2	157.4	137.1	128.9
37.5°	201.6	174.3	139.3	117.5	107.6
40°	184.7	156.3	121.3	96.7	87.4
42.5°	167.7	139.9	103.3	78.1	67.2
45°	150.3	122.9	86.9	60.1	48.6
47.5°	132.8	106.0	71.0	43.7	36.6
50°	115.8	90.2	55.2	32.2	30.1
52.5°	97.3	74.9	41.5	26.8	26.2
55°	78.7	59.0	29.5	22.9	22.4
57.5°	62.3	45.9	21.3	19.1	18.6
60°	44.8	32.8	16.4	15.8	15.3
62.5°	29.5	22.4	13.1	12.6	12.6
65°	15.8	13.7	10.4	9.8	10.4
67.5°	6.6	7.6	7.6	8.2	8.2
70°	4.4	4.9	6.0	6.6	6.6
72.5°	3.3	3.8	4.4	4.9	4.9
75°	2.7	2.7	3.3	3.8	3.8
77.5°	1.6	2.2	2.2	2.7	3.3
80°	1.1	1.6	1.6	2.2	2.2
82.5°	0.5	1.1	1.1	1.6	1.6
85°	0.5	0.5	0.5	0.5	1.1
87.5°	0.0	0.0	0.0	0.0	0.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)