

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: P1059290

Luminaire Tested: S123RDR-S560D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059290  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S560D927-X4F0-XX-UDD-WVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

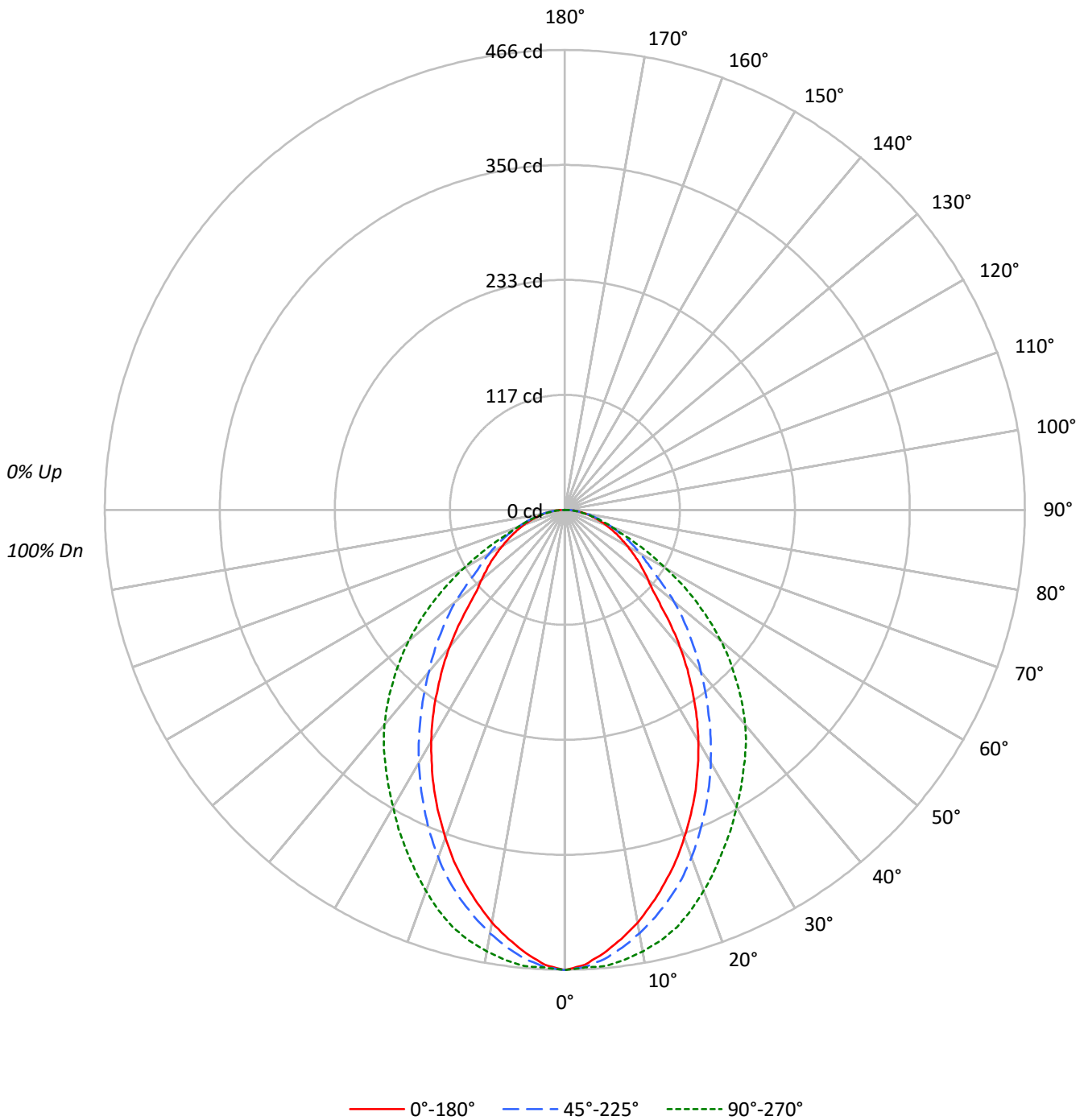
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 842.4 lumens  
Efficiency: N/A  
Efficacy: 43.0 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1  
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										
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	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	75	75	75														
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	65	65	65	65	65														
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57	57	57	57														
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51	51	51	51	51	51	51														
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45														
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41	41	41	41	41	41	41														
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37	37	37	37	37	37	37														
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34	34	34	34	34	34	34														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31	31	31	31	31	31	31														

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

	0°	45°	90°
0°	5475	5475	5475
5°	5316	5387	5470
10°	5065	5195	5417
15°	4758	4965	5323
20°	4420	4686	5137
25°	4059	4356	4923
30°	3669	4011	4714
35°	3237	3644	4537
40°	2782	3285	4358
45°	2288	2959	4085
50°	2008	2636	3765
55°	1859	2250	3335
60°	1707	2067	2759
65°	1595	1898	2173
70°	1500	1727	1727
75°	1416	1588	1488
80°	1332	1440	1258
85°	1253	1401	957

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4085 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.1	5.1
10°-20°	115.6	13.7
20°-30°	156.7	18.6
30°-40°	163.9	19.5
40°-50°	142.1	16.9
50°-60°	105.7	12.6
60°-70°	67.8	8.1
70°-80°	36.4	4.3
80°-90°	11.0	1.3
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°	315.4	37.4
0°-40°	479.3	56.9
0°-60°	727.2	86.3
0°-90°	842.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	842.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	466	466	466	466	466	
5°	451	459	457	460	464	42
15°	391	401	408	425	438	110
25°	313	323	336	359	380	144
35°	226	237	254	286	316	141
45°	138	148	178	216	246	108
55°	91	93	110	141	163	81
65°	57	62	68	73	78	57
75°	31	36	35	33	33	33
85°	9	12	10	9	7	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	466.3	466.3	466.3	466.3	466.3
2.5°	461.4	468.0	463.6	463.6	464.1
5°	451.0	458.7	457.0	460.3	464.1
7.5°	438.4	446.6	447.2	454.8	460.3
10°	424.8	433.0	435.7	446.6	454.3
12.5°	408.4	417.7	422.6	436.3	447.2
15°	391.4	400.7	408.4	424.8	437.9
17.5°	373.4	382.7	392.5	411.1	425.3
20°	353.7	363.6	375.0	393.6	411.1
22.5°	333.5	343.9	355.9	376.1	395.8
25°	313.3	323.1	336.2	358.6	380.0
27.5°	291.9	302.3	316.0	340.6	364.6
30°	270.6	281.0	295.8	322.0	347.7
32.5°	248.7	259.1	275.0	304.5	332.4
35°	225.8	236.7	254.2	286.5	316.5
37.5°	203.9	214.3	234.0	269.5	301.2
40°	181.5	192.4	214.3	252.6	284.3
42.5°	159.6	170.6	196.3	234.5	265.7
45°	137.8	148.2	178.2	216.5	246.0
47.5°	120.8	128.5	161.3	197.4	226.9
50°	109.9	112.6	144.3	178.8	206.1
52.5°	100.0	102.2	125.7	160.2	184.8
55°	90.8	92.9	109.9	141.0	162.9
57.5°	81.5	84.2	97.9	121.4	141.0
60°	72.7	76.0	88.0	103.9	117.5
62.5°	65.1	68.9	78.2	88.0	97.3
65°	57.4	62.3	68.3	72.7	78.2
67.5°	50.3	55.8	59.0	60.1	60.7
70°	43.7	49.2	50.3	50.3	50.3
72.5°	37.2	43.2	42.1	41.5	41.0
75°	31.2	36.1	35.0	33.3	32.8
77.5°	25.1	29.5	27.9	26.8	25.1
80°	19.7	23.0	21.3	20.2	18.6
82.5°	14.8	16.9	15.3	14.2	12.6
85°	9.3	11.5	10.4	8.7	7.1
87.5°	4.9	6.6	5.5	4.9	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)