

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: P1059285

Luminaire Tested: S123RDR-S560D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059285  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S560D927-X4F0-XX-UDD-BVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

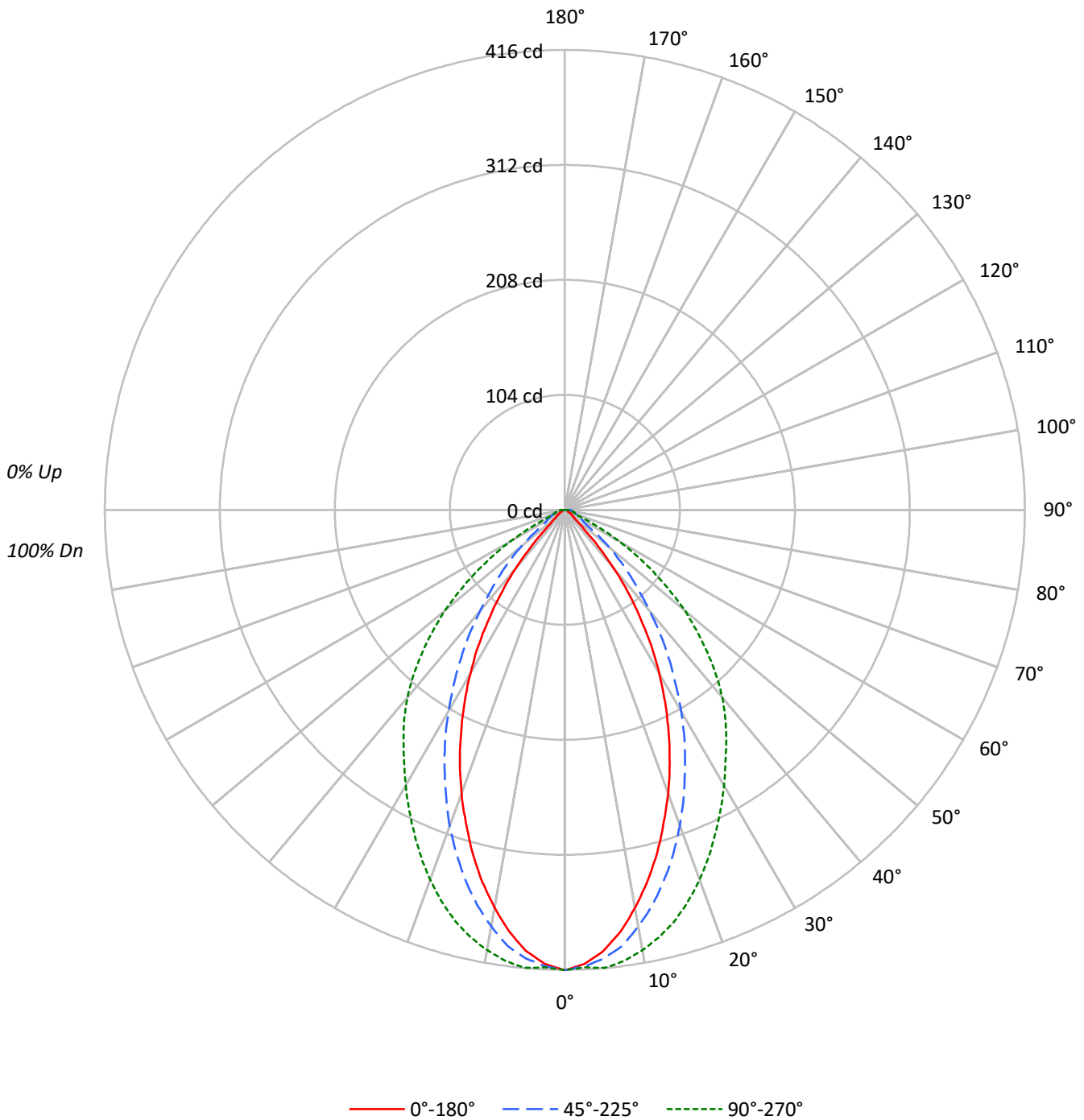
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 500.0 lumens  
Efficiency: N/A  
Efficacy: 25.5 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	
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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	88	94	90	86	91	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	69	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	65	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47				
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	42	40				

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

	0°	45°	90°
0°	4890	4890	4890
5°	4722	4799	4902
10°	4358	4561	4822
15°	3912	4217	4677
20°	3413	3801	4451
25°	2879	3332	4176
30°	2315	2849	3902
35°	1694	2345	3648
40°	1056	1829	3397
45°	400	1363	3026
50°	190	939	2579
55°	145	516	1994
60°	103	437	1310
65°	75	381	547
70°	76	357	357
75°	100	372	372
80°	149	446	406
85°	296	741	593

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3026 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.2	7.6
10°-20°	98.0	19.6
20°-30°	121.3	24.3
30°-40°	108.8	21.8
40°-50°	71.3	14.3
50°-60°	35.7	7.1
60°-70°	13.9	2.8
70°-80°	7.9	1.6
80°-90°	4.8	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°	257.6	51.5
0°-40°	366.4	73.3
0°-60°	473.4	94.7
0°-90°	500.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	500.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	401	407	407	412	416	37
15°	322	335	347	370	385	90
25°	222	236	257	294	322	101
35°	118	134	164	213	254	74
45°	24	39	82	141	182	23
55°	7	9	25	69	97	7
65°	3	8	14	18	20	3
75°	2	8	8	8	8	2
85°	2	6	6	6	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	416.4	416.4	416.4	416.4	416.4
2.5°	411.0	417.0	413.1	413.7	414.2
5°	400.6	407.1	407.1	411.5	415.9
7.5°	384.7	392.4	397.8	405.5	411.5
10°	365.5	374.8	382.5	396.2	404.4
12.5°	344.7	356.2	366.1	384.1	395.6
15°	321.8	334.9	346.9	369.9	384.7
17.5°	297.1	310.3	326.1	353.0	371.0
20°	273.1	286.2	304.2	334.3	356.2
22.5°	247.9	261.6	280.7	314.1	339.8
25°	222.2	235.8	257.2	293.9	322.3
27.5°	196.4	210.1	234.2	274.2	305.3
30°	170.7	184.4	210.1	252.8	287.8
32.5°	145.0	159.8	186.6	233.1	270.3
35°	118.2	134.1	163.6	212.9	254.5
37.5°	93.6	108.3	141.7	195.4	238.6
40°	68.9	84.8	119.3	178.4	221.6
42.5°	44.9	61.8	99.0	159.8	202.5
45°	24.1	38.9	82.1	140.6	182.2
47.5°	13.1	21.3	66.2	120.4	161.4
50°	10.4	12.0	51.4	102.9	141.2
52.5°	8.8	9.8	36.7	86.5	118.7
55°	7.1	8.8	25.2	68.9	97.4
57.5°	6.0	7.7	19.7	53.6	76.1
60°	4.4	6.6	18.6	39.4	55.8
62.5°	3.3	7.1	16.4	27.4	36.7
65°	2.7	8.2	13.7	18.1	19.7
67.5°	2.2	8.8	12.0	11.5	11.5
70°	2.2	8.2	10.4	9.8	10.4
72.5°	2.2	8.8	9.3	8.8	9.3
75°	2.2	8.2	8.2	8.2	8.2
77.5°	2.2	7.7	7.7	7.1	7.1
80°	2.2	6.6	6.6	6.6	6.0
82.5°	2.2	6.0	6.0	6.0	4.9
85°	2.2	5.5	5.5	5.5	4.4
87.5°	1.6	4.9	5.5	4.9	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)