

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: P1059322

Luminaire Tested: S123RDR-S560D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

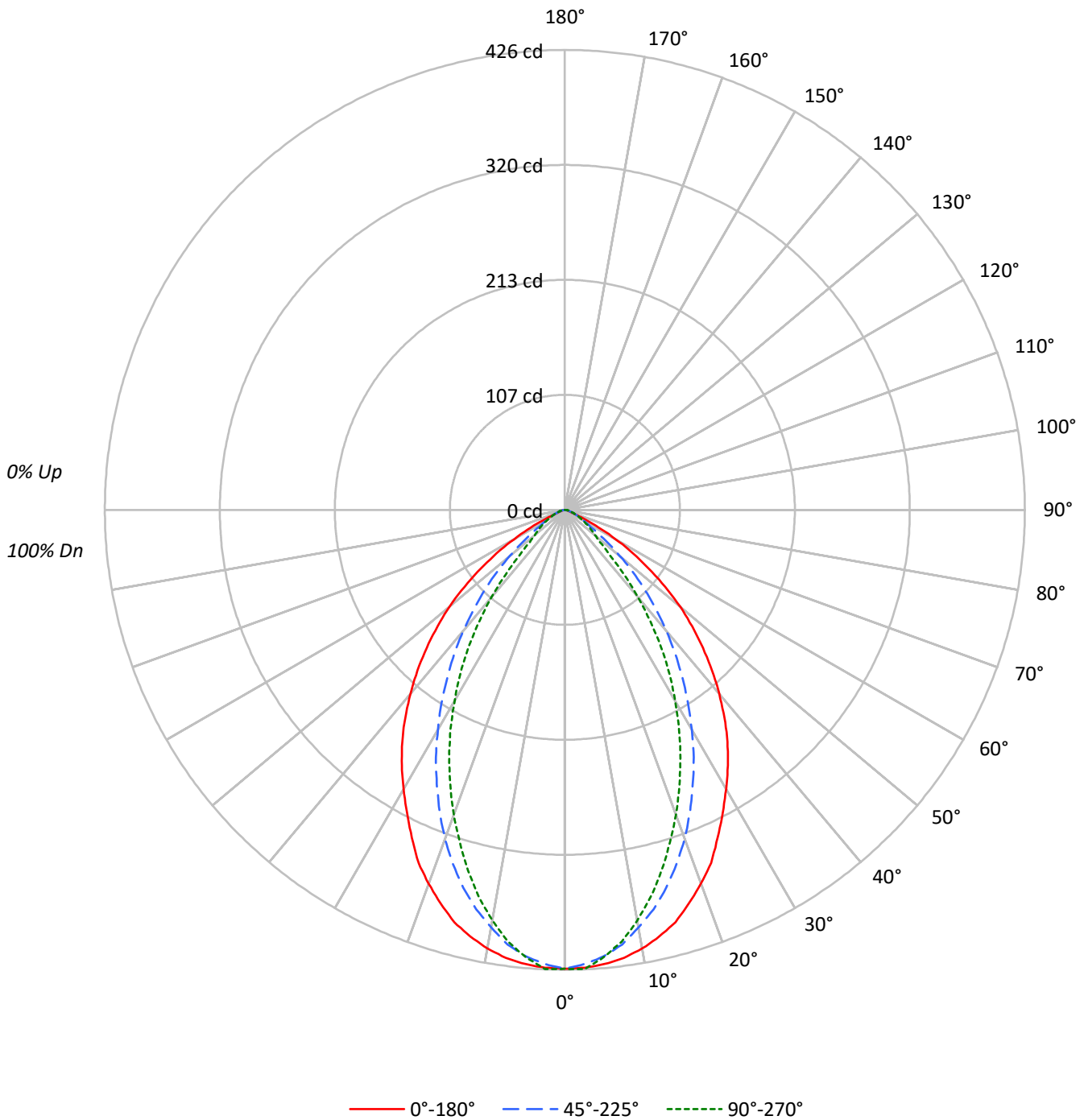
Test Method: LM-79-2019  
Report Number: P1059322  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S560D950-X4F0-XX-UDD-SVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 548.7 lumens  
Efficiency: N/A  
Efficacy: 28.0 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	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°	4992	4992	4992
5°	4979	4894	4901
10°	4920	4684	4605
15°	4807	4407	4207
20°	4605	4054	3758
25°	4339	3632	3282
30°	4050	3185	2766
35°	3763	2716	2226
40°	3409	2240	1614
45°	3004	1737	973
50°	2548	1215	661
55°	1939	727	553
60°	1268	463	432
65°	531	347	347
70°	182	247	271
75°	150	177	209
80°	88	135	176
85°	94	94	175

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3004 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.3	7.2
10°-20°	102.7	18.7
20°-30°	131.7	24.0
30°-40°	123.6	22.5
40°-50°	86.2	15.7
50°-60°	44.6	8.1
60°-70°	15.2	2.8
70°-80°	4.3	0.8
80°-90°	0.9	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°	273.7	49.9
0°-40°	397.4	72.4
0°-60°	528.2	96.3
0°-90°	548.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	548.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	422	422	415	417	416	40
15°	395	386	362	351	346	111
25°	335	314	280	261	253	154
35°	262	230	190	165	155	163
45°	181	148	105	72	59	139
55°	95	71	36	28	27	85
65°	19	16	12	12	12	23
75°	3	3	4	5	5	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	425.1	425.1	425.1	425.1	425.1
2.5°	424.4	425.1	421.1	425.1	425.7
5°	422.4	421.8	415.2	417.2	415.8
7.5°	418.5	416.5	406.0	403.3	403.3
10°	412.6	408.6	392.8	388.2	386.2
12.5°	404.7	399.4	379.0	370.4	367.2
15°	395.4	385.6	362.5	350.7	346.1
17.5°	382.3	369.1	344.1	330.3	323.1
20°	368.5	352.0	324.4	307.9	300.7
22.5°	354.0	334.3	302.7	284.9	277.0
25°	334.9	313.9	280.3	261.2	253.3
27.5°	316.5	294.1	258.6	236.9	229.0
30°	298.7	272.4	234.9	213.8	204.0
32.5°	281.0	251.3	212.5	189.5	180.3
35°	262.5	230.3	189.5	165.2	155.3
37.5°	242.8	209.9	167.8	141.5	129.6
40°	222.4	188.2	146.1	116.5	105.3
42.5°	202.0	168.4	124.4	94.1	80.9
45°	180.9	148.0	104.6	72.4	58.6
47.5°	159.9	127.6	85.5	52.6	44.1
50°	139.5	108.6	66.5	38.8	36.2
52.5°	117.1	90.1	50.0	32.2	31.6
55°	94.7	71.1	35.5	27.6	27.0
57.5°	75.0	55.3	25.7	23.0	22.4
60°	54.0	39.5	19.7	19.1	18.4
62.5°	35.5	27.0	15.8	15.1	15.1
65°	19.1	16.4	12.5	11.8	12.5
67.5°	7.9	9.2	9.2	9.9	9.9
70°	5.3	5.9	7.2	7.9	7.9
72.5°	3.9	4.6	5.3	5.9	5.9
75°	3.3	3.3	3.9	4.6	4.6
77.5°	2.0	2.6	2.6	3.3	3.9
80°	1.3	2.0	2.0	2.6	2.6
82.5°	0.7	1.3	1.3	2.0	2.0
85°	0.7	0.7	0.7	0.7	1.3
87.5°	0.0	0.0	0.0	0.0	0.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)