

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: P1059325

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059325  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S560D950-X4F0-XX-UDD-WVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

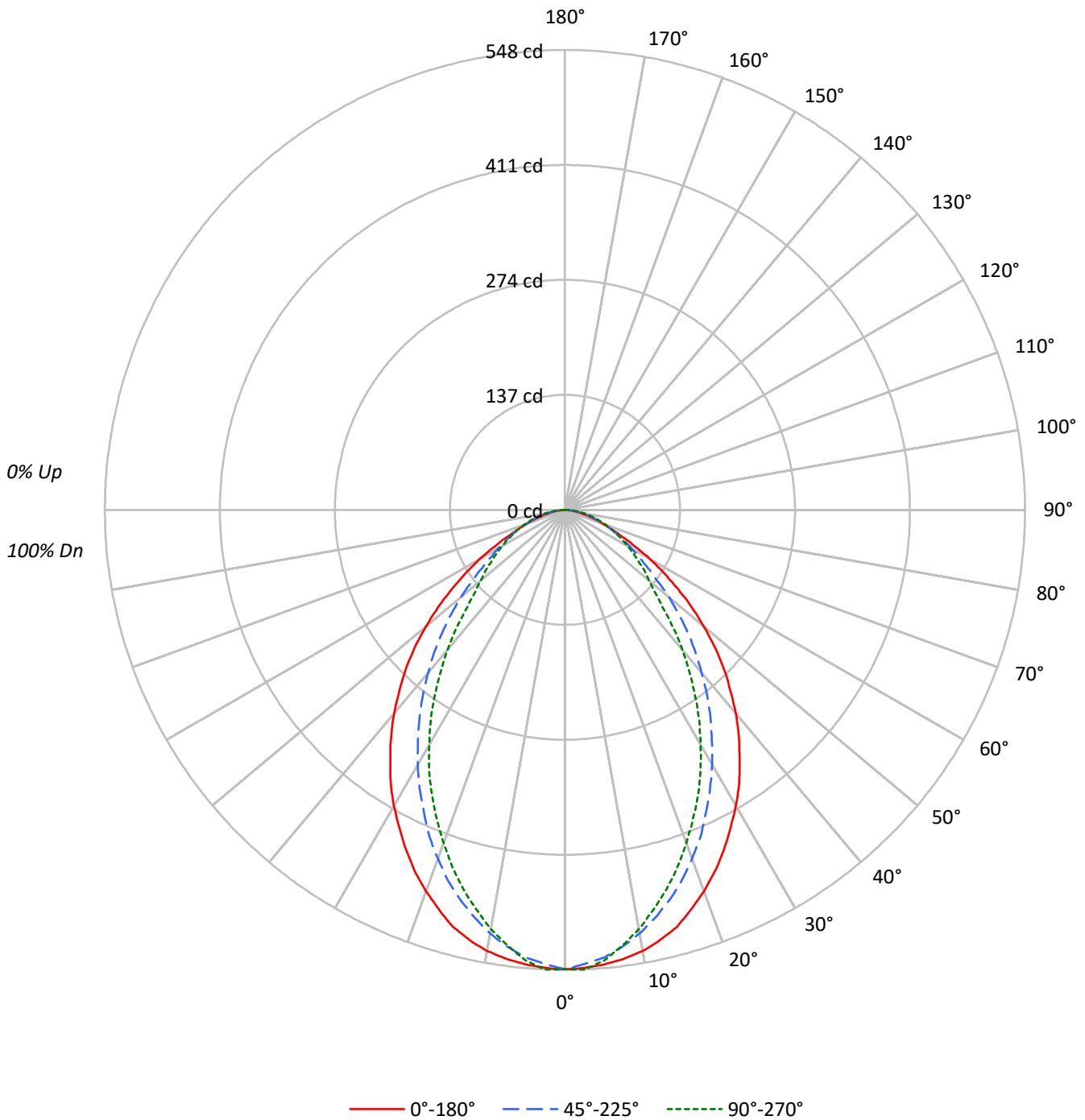
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 957.5 lumens  
Efficiency: N/A  
Efficacy: 48.9 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09  
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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52				
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35				
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				

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

	0°	45°	90°
0°	6428	6428	6428
5°	6406	6313	6352
10°	6362	6112	6049
15°	6255	5847	5687
20°	6043	5526	5278
25°	5797	5149	4859
30°	5523	4755	4381
35°	5196	4329	3876
40°	4852	3883	3339
45°	4447	3431	2742
50°	3942	2945	2380
55°	3353	2465	2182
60°	2736	2149	2024
65°	2084	1900	1884
70°	1627	1693	1761
75°	1316	1524	1642
80°	981	1244	1515
85°	525	795	1334

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4447 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.8	5.3
10°-20°	136.7	14.3
20°-30°	185.9	19.4
30°-40°	192.7	20.1
40°-50°	162.5	17.0
50°-60°	115.3	12.0
60°-70°	70.5	7.4
70°-80°	35.1	3.7
80°-90°	8.0	0.8
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°	373.4	39.0
0°-40°	566.1	59.1
0°-60°	843.9	88.1
0°-90°	957.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	957.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	547	547	547	547	547	
5°	544	544	536	539	539	52
15°	514	505	481	472	468	144
25°	447	428	397	383	375	206
35°	362	335	302	281	270	227
45°	268	240	207	178	165	206
55°	164	147	120	110	107	147
65°	75	72	68	68	68	77
75°	29	31	34	35	36	31
85°	4	5	6	9	10	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	547.4	547.4	547.4	547.4	547.4
2.5°	546.1	546.8	541.5	547.4	548.1
5°	543.5	543.5	535.6	538.9	538.9
7.5°	539.5	538.2	525.1	525.1	523.7
10°	533.6	529.7	512.6	509.3	507.3
12.5°	525.1	518.5	497.4	491.5	487.6
15°	514.5	504.7	481.0	472.4	467.8
17.5°	499.4	489.5	463.2	451.4	446.1
20°	483.6	469.1	442.2	430.3	422.4
22.5°	466.5	448.1	421.8	407.3	398.7
25°	447.4	427.7	397.4	382.9	375.0
27.5°	427.0	405.3	374.4	357.9	350.0
30°	407.3	382.3	350.7	332.3	323.1
32.5°	386.2	357.9	325.7	306.6	297.4
35°	362.5	334.9	302.0	281.0	270.4
37.5°	340.2	311.9	277.7	255.3	243.4
40°	316.5	288.2	253.3	230.3	217.8
42.5°	291.5	264.5	230.3	203.3	191.5
45°	267.8	239.5	206.6	178.3	165.1
47.5°	242.1	215.8	183.6	154.6	145.4
50°	215.8	191.5	161.2	134.9	130.3
52.5°	190.2	169.8	138.8	121.7	119.7
55°	163.8	146.7	120.4	109.9	106.6
57.5°	139.5	127.0	103.3	98.0	96.7
60°	116.5	105.9	91.5	88.2	86.2
62.5°	94.1	88.2	79.6	78.3	77.0
65°	75.0	72.4	68.4	68.4	67.8
67.5°	59.2	59.2	58.6	59.9	59.2
70°	47.4	48.0	49.3	50.7	51.3
72.5°	37.5	39.5	40.8	42.8	43.4
75°	29.0	30.9	33.6	34.9	36.2
77.5°	21.1	23.0	25.7	27.6	29.0
80°	14.5	15.8	18.4	21.1	22.4
82.5°	9.2	9.9	11.8	14.5	15.8
85°	3.9	4.6	5.9	8.6	9.9
87.5°	0.0	0.0	0.7	2.6	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)