

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: P1059133

Luminaire Tested: S123RDR-S1165D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059133  
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-S1165D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

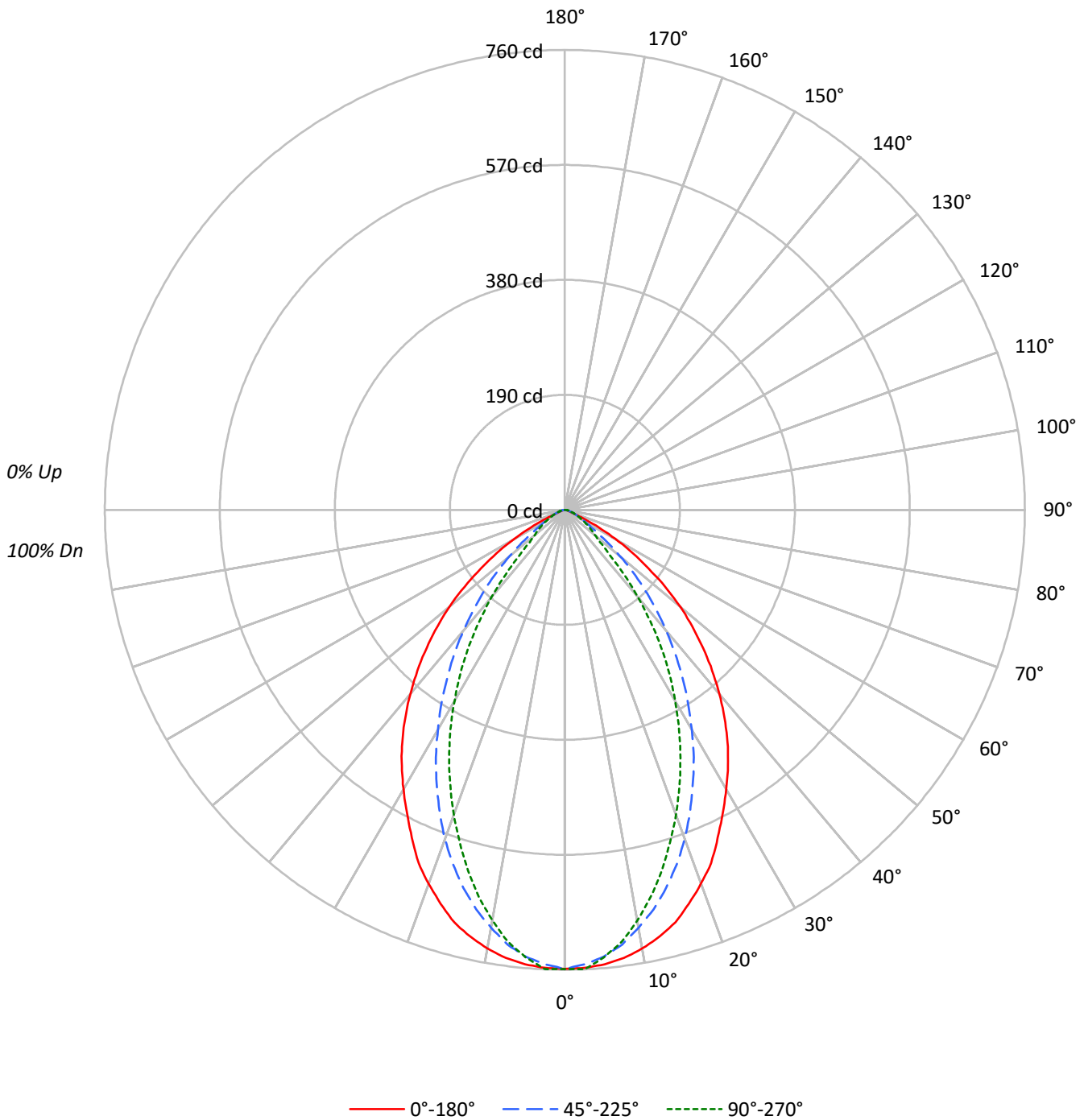
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 979.4 lumens  
Efficiency: N/A  
Efficacy: 23.4 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): 41.8  
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	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°	8908	8908	8908
5°	8886	8734	8749
10°	8779	8360	8219
15°	8580	7867	7509
20°	8217	7235	6707
25°	7744	6482	5858
30°	7230	5684	4937
35°	6717	4848	3972
40°	6084	3996	2880
45°	5362	3100	1735
50°	4549	2167	1180
55°	3462	1298	985
60°	2262	827	773
65°	947	620	620
70°	323	443	484
75°	268	318	372
80°	156	237	318
85°	162	162	310

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5362 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	7.2
10°-20°	183.4	18.7
20°-30°	235.1	24.0
30°-40°	220.7	22.5
40°-50°	153.9	15.7
50°-60°	79.6	8.1
60°-70°	27.2	2.8
70°-80°	7.8	0.8
80°-90°	1.6	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°	488.6	49.9
0°-40°	709.2	72.4
0°-60°	942.7	96.3
0°-90°	979.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	979.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	759	759	759	759	759	
5°	754	753	741	744	742	71
15°	706	688	647	626	618	198
25°	598	560	500	466	452	275
35°	469	411	338	295	277	292
45°	323	264	187	129	104	249
55°	169	127	63	49	48	152
65°	34	29	22	21	22	40
75°	6	6	7	8	8	6
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	758.6	758.6	758.6	758.6	758.6
2.5°	757.5	758.6	751.6	758.6	759.8
5°	753.9	752.8	741.0	744.5	742.2
7.5°	746.9	743.4	724.6	719.9	719.9
10°	736.3	729.3	701.1	692.9	689.3
12.5°	722.2	712.8	676.4	661.2	655.3
15°	705.8	688.2	647.1	625.9	617.7
17.5°	682.3	658.8	614.2	589.5	576.6
20°	657.6	628.3	579.0	549.6	536.7
22.5°	631.8	596.6	540.2	508.5	494.4
25°	597.7	560.2	500.3	466.2	452.1
27.5°	564.9	524.9	461.5	422.8	408.7
30°	533.2	486.2	419.2	381.7	364.1
32.5°	501.5	448.6	379.3	338.2	321.8
35°	468.6	411.0	338.2	294.8	277.1
37.5°	433.3	374.6	299.5	252.5	231.3
40°	396.9	335.9	260.7	207.9	187.9
42.5°	360.5	300.6	222.0	167.9	144.4
45°	322.9	264.2	186.7	129.2	104.5
47.5°	285.4	227.8	152.7	93.9	78.7
50°	249.0	193.8	118.6	69.3	64.6
52.5°	209.0	160.9	89.3	57.5	56.4
55°	169.1	126.8	63.4	49.3	48.1
57.5°	133.9	98.6	45.8	41.1	39.9
60°	96.3	70.5	35.2	34.1	32.9
62.5°	63.4	48.1	28.2	27.0	27.0
65°	34.1	29.4	22.3	21.1	22.3
67.5°	14.1	16.4	16.4	17.6	17.6
70°	9.4	10.6	12.9	14.1	14.1
72.5°	7.0	8.2	9.4	10.6	10.6
75°	5.9	5.9	7.0	8.2	8.2
77.5°	3.5	4.7	4.7	5.9	7.0
80°	2.3	3.5	3.5	4.7	4.7
82.5°	1.2	2.3	2.3	3.5	3.5
85°	1.2	1.2	1.2	1.2	2.3
87.5°	0.0	0.0	0.0	0.0	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)