

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: P1059057

Luminaire Tested: S123RDR-S1000D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059057  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D930-X4F0-XX-UDD-WVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

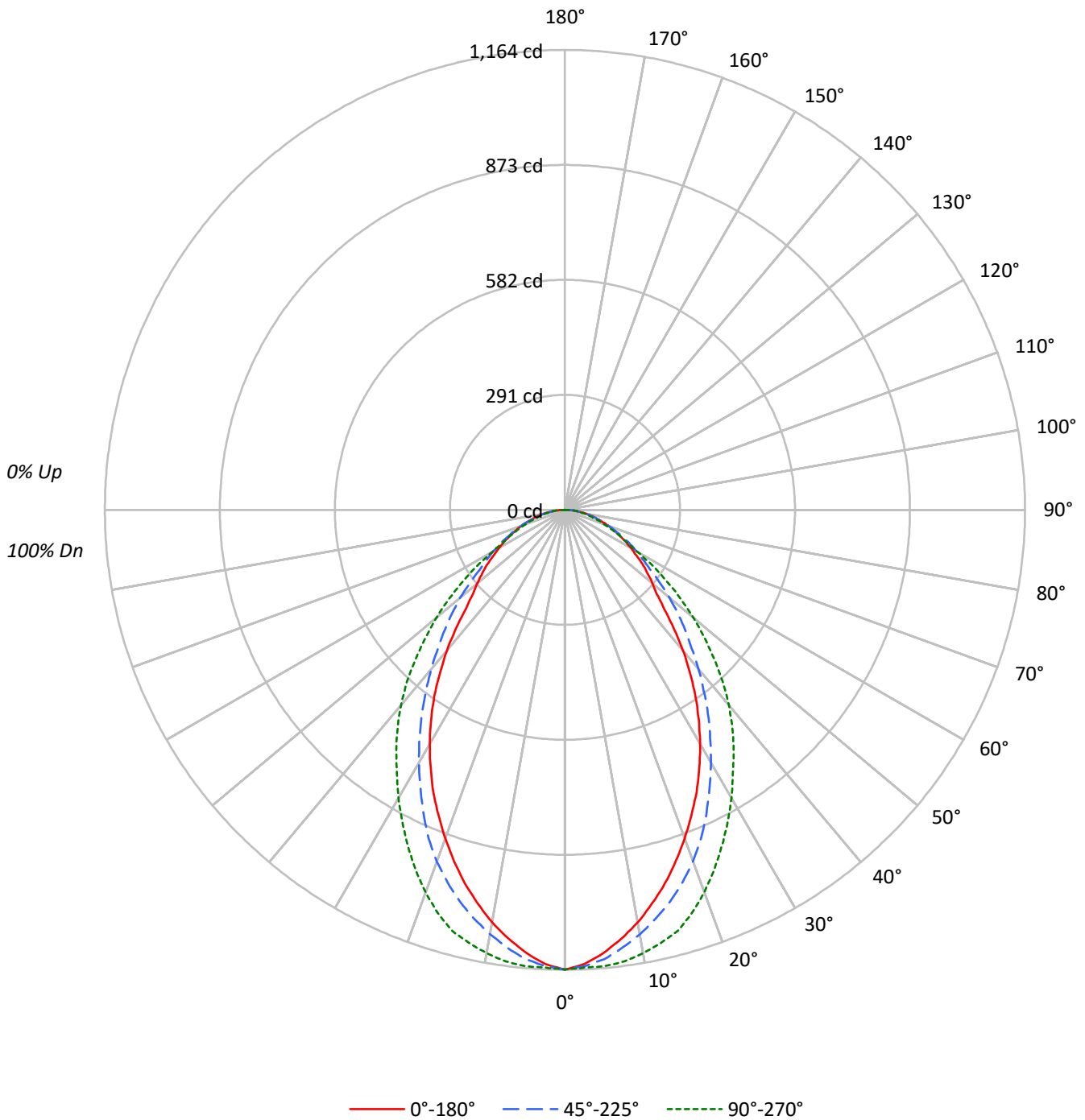
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2044.5 lumens  
Efficiency: N/A  
Efficacy: 58.4 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35  
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

TEST NUMBER: P1059057

CATALOG NUMBER: S123RDR-S1000D930-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1059057

CATALOG NUMBER: S123RDR-S1000D930-X4F0-XX-UDD-WVL-W

**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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51				
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32				

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

	0°	45°	90°
0°	13662	13662	13662
5°	13267	13455	13667
10°	12644	13001	13587
15°	11893	12476	13414
20°	11061	11836	12875
25°	10210	10975	12169
30°	9273	10020	11418
35°	8254	9042	10665
40°	7122	8058	9884
45°	5887	7134	8863
50°	5287	6293	7738
55°	4899	5370	6416
60°	4516	4892	4915
65°	4201	4423	4118
70°	3955	4024	3608
75°	3725	3589	3180
80°	3523	3253	2982
85°	3368	3638	3368

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8863 cd/sqm



TEST NUMBER: P1059057

CATALOG NUMBER: S123RDR-S1000D930-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.8	5.3
10°-20°	290.3	14.2
20°-30°	392.8	19.2
30°-40°	403.6	19.7
40°-50°	339.0	16.6
50°-60°	243.0	11.9
60°-70°	154.7	7.6
70°-80°	85.0	4.2
80°-90°	28.3	1.4
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°	790.8	38.7
0°-40°	1194.5	58.4
0°-60°	1776.4	86.9
0°-90°	2044.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2044.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1164	1164	1164	1164	1164	
5°	1126	1146	1142	1150	1160	105
15°	978	1005	1026	1070	1103	274
25°	788	818	847	893	939	361
35°	576	607	631	687	744	358
45°	354	386	430	492	534	280
55°	239	244	262	297	313	214
65°	151	160	159	150	148	151
75°	82	90	79	73	70	87
85°	25	26	27	28	25	27
90°	0	0	0	0	0	



TEST NUMBER: P1059057

CATALOG NUMBER: S123RDR-S1000D930-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1163.5	<i>1163.5</i>	1163.5	1163.5	1163.5
2.5°	<i>1150.5</i>	<i>1166.5</i>	<i>1155.5</i>	<i>1156.5</i>	<i>1159.5</i>
5°	1125.5	<i>1145.5</i>	1141.5	1149.5	1159.5
7.5°	1094.4	<i>1116.5</i>	1117.5	1136.5	1152.5
10°	1060.4	<i>1083.4</i>	1090.4	1119.5	1139.5
12.5°	1020.3	<i>1045.4</i>	1060.4	1096.4	1122.5
15°	978.3	<i>1005.3</i>	1026.3	1070.4	1103.4
17.5°	932.2	<i>961.3</i>	988.3	1035.4	1069.4
20°	885.2	<i>916.2</i>	947.2	991.3	1030.3
22.5°	836.1	<i>868.1</i>	900.2	943.2	986.3
25°	788.0	<i>818.1</i>	847.1	893.2	939.2
27.5°	736.0	<i>767.0</i>	792.0	843.1	891.2
30°	683.9	<i>714.9</i>	739.0	792.0	842.1
32.5°	629.8	<i>661.9</i>	683.9	739.0	791.0
35°	575.8	<i>606.8</i>	630.8	686.9	744.0
37.5°	518.7	<i>552.7</i>	576.8	639.8	695.9
40°	464.6	<i>496.7</i>	525.7	591.8	644.8
42.5°	408.5	<i>441.6</i>	474.6	542.7	591.8
45°	354.5	<i>385.5</i>	429.6	491.6	533.7
47.5°	315.4	<i>335.4</i>	386.5	438.6	478.6
50°	289.4	<i>297.4</i>	344.5	390.5	423.6
52.5°	263.3	<i>269.4</i>	301.4	343.4	368.5
55°	239.3	<i>244.3</i>	262.3	297.4	313.4
57.5°	213.3	<i>218.3</i>	233.3	253.3	262.3
60°	192.3	<i>196.3</i>	208.3	211.3	209.3
62.5°	171.2	<i>177.2</i>	183.2	176.2	173.2
65°	151.2	<i>160.2</i>	159.2	150.2	148.2
67.5°	133.2	<i>142.2</i>	137.2	128.2	125.2
70°	115.2	<i>124.2</i>	117.2	108.1	105.1
72.5°	98.1	<i>108.1</i>	97.1	89.1	87.1
75°	82.1	<i>90.1</i>	79.1	73.1	70.1
77.5°	67.1	<i>73.1</i>	63.1	58.1	56.1
80°	52.1	<i>56.1</i>	48.1	45.1	44.1
82.5°	38.0	<i>40.1</i>	35.0	37.0	36.0
85°	25.0	<i>26.0</i>	27.0	28.0	25.0
87.5°	12.0	<i>17.0</i>	17.0	16.0	13.0
90°	0.0	<i>0.0</i>	0.0	0.0	0.0

(END OF REPORT)