

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: P1059048

Luminaire Tested: S123RDR-S1000D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059048  
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-S1000D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

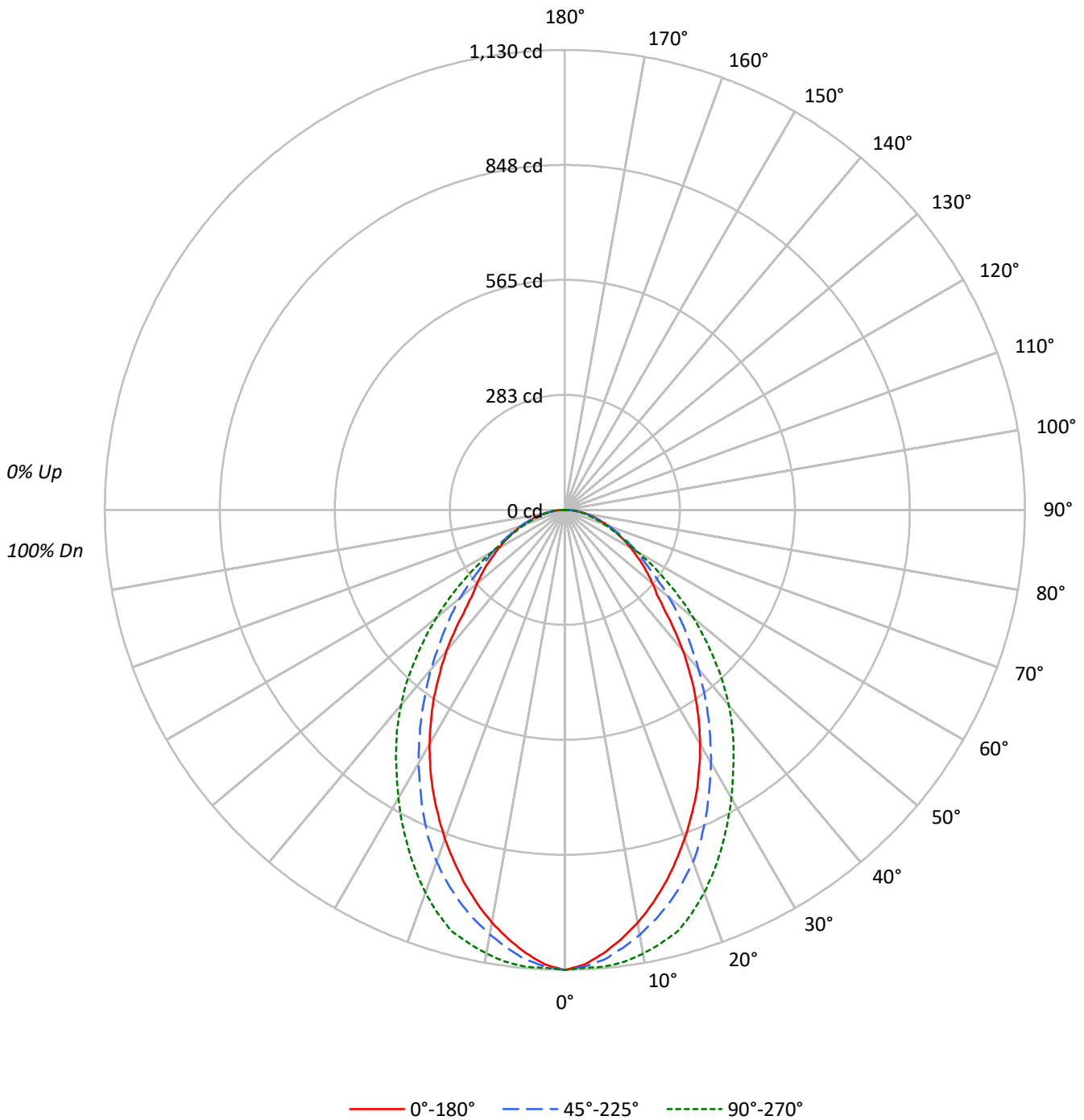
Lumens per Lamp: N/A  
Luminaire Lumens: 1986.6 lumens  
Efficiency: N/A  
Efficacy: 56.8 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

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

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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	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°	13275	13275	13275
5°	12891	13073	13280
10°	12285	12633	13202
15°	11555	12123	13034
20°	10748	11501	12510
25°	9921	10664	11824
30°	9010	9735	11094
35°	8019	8786	10363
40°	6919	7830	9605
45°	5719	6931	8612
50°	5137	6114	7517
55°	4760	5218	6234
60°	4387	4753	4774
65°	4082	4298	4001
70°	3842	3907	3509
75°	3620	3489	3090
80°	3422	3158	2894
85°	3274	3543	3274

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8612 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.7	5.3
10°-20°	282.1	14.2
20°-30°	381.6	19.2
30°-40°	392.2	19.7
40°-50°	329.4	16.6
50°-60°	236.1	11.9
60°-70°	150.3	7.6
70°-80°	82.6	4.2
80°-90°	27.5	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°	768.4	38.7
0°-40°	1160.6	58.4
0°-60°	1726.1	86.9
0°-90°	1986.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1986.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1094	1113	1109	1117	1127	102
15°	950	977	997	1040	1072	266
25°	766	795	823	868	913	351
35°	559	590	613	667	723	348
45°	344	375	417	478	519	272
55°	232	237	255	289	304	208
65°	147	156	155	146	144	146
75°	80	88	77	71	68	85
85°	24	25	26	27	24	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1130.5	1130.5	1130.5	1130.5	1130.5
2.5°	1117.9	1133.5	1122.8	1123.7	1126.6
5°	1093.6	1113.0	1109.1	1116.9	1126.6
7.5°	1063.4	1084.8	1085.8	1104.3	1119.8
10°	1030.3	1052.7	1059.5	1087.7	1107.2
12.5°	991.4	1015.7	1030.3	1065.3	1090.6
15°	950.5	976.8	997.2	1040.1	1072.2
17.5°	905.8	934.0	960.3	1006.0	1039.1
20°	860.1	890.2	920.4	963.2	1001.1
22.5°	812.4	843.5	874.7	916.5	958.3
25°	765.7	794.9	823.1	867.8	912.6
27.5°	715.1	745.3	769.6	819.2	865.9
30°	664.5	694.7	718.0	769.6	818.2
32.5°	612.0	643.1	664.5	718.0	768.6
35°	559.4	589.6	612.9	667.4	722.9
37.5°	504.0	537.1	560.4	621.7	676.2
40°	451.4	482.6	510.8	575.0	626.6
42.5°	397.0	429.1	461.2	527.3	575.0
45°	344.4	374.6	417.4	477.7	518.6
47.5°	306.5	325.9	375.5	426.1	465.1
50°	281.2	289.0	334.7	379.4	411.5
52.5°	255.9	261.7	292.8	333.7	358.0
55°	232.5	237.4	254.9	289.0	304.5
57.5°	207.2	212.1	226.7	246.1	254.9
60°	186.8	190.7	202.4	205.3	203.3
62.5°	166.4	172.2	178.0	171.2	168.3
65°	146.9	155.7	154.7	145.9	144.0
67.5°	129.4	138.2	133.3	124.5	121.6
70°	111.9	120.6	113.8	105.1	102.2
72.5°	95.3	105.1	94.4	86.6	84.6
75°	79.8	87.6	76.9	71.0	68.1
77.5°	65.2	71.0	61.3	56.4	54.5
80°	50.6	54.5	46.7	43.8	42.8
82.5°	37.0	38.9	34.1	36.0	35.0
85°	24.3	25.3	26.3	27.2	24.3
87.5°	11.7	16.5	16.5	15.6	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)